

Chapter 1

Introduction to a description of the grammar of Chinese

1.1 Introduction

This thesis aims to explore the clause grammar of Chinese from a systemic functional perspective, focusing on the system networks of three modes of meaning, namely ideational, interpersonal and textual. It also intends to extend the clause grammar towards discourse semantics through exploring the non-arbitrary relationship between the systems at the semantic and lexicogrammatic strata. This means that it will examine the systems which (1) regulate the mechanism of turn-taking in dialogues, (2) are significant to textual cohesion and coherence, and (3) control the flow of information and constitute the method of text development. Finally, it is also intended to shed light on the task of translating between Chinese and English and on teaching Chinese to English speakers by making reference to the grammar of English in general, and by contrasting the major system networks of the two languages in particular.

This chapter outlines ‘maps’ upon which the present study is located, mapping out the way in which the chapters in this thesis are organised. It sketches the following maps: a historical map of the study of language in China (Section 1.2), a theoretical map of the grammatics, namely systemic functional theory (Sections 1.3-6), an epistemological map of data collection and analysis (Section 1.7) and finally a general map of the organisation of the whole thesis (Section 1.7). The theoretical map outlined in Sections 1.3-6 however intends to provide an overview only with specific reviews of the literature left to each chapter. This *modus operandi* may deviate from the traditional model of how a thesis should be organised; however, in consideration of the fact that the present study will explore numerous system networks across the ideational, interpersonal and textual metafunctions at both the semantic and lexicogrammatical strata of the content plane, dispatching the detailed reviews to the relevant chapters is a means of lessening the burden on memory for both readers and the writer.

1.2 Historical background to the study of language in China

The first map to be sketched concerns the historical background to the study of language in China. According to *Hàn shū: yì wén zhì* (The Book of Han: a record of art and language), which is a historical record dating back to 200 BC, the study of language in ancient China was called *xiànxué* (Wang 1964). It originally referred to the schools which children from aged eight to fourteen attended. In these schools, students learnt *liù yì* (six skills), namely ritual, music, archery, riding, writing and arithmetic, which are the most fundamental subjects on the path towards knowledge of Chinese culture. As time went on, the meaning of *xiànxué* changed from the schools to their curriculum, the core subjects included *liù shū* (six principles), namely (1) hieroglyph, (2) picture of action, (3) ideograph, (4) phonetic symbol, (5) figurative extension of meaning and (6) making one form stand for another word, i.e. the six principles of Chinese script formation (Xu 1996). Then another ancient record known as *Suìshū: jīng jí zhì* (The Book of Sui: the record of book and document), which dates back to around 581-618 AD, reveals that the meaning of *xiànxué* had been expanded to cover *xùngǔ* (scholium), *yīnyùn* (phonology) and *tǐshì* (construction of script). Apart from *Suìshū: jīng jí zhì*, another two ancient works, namely *Jiù tóngshū: jīng jí zhì* (The Book of Ancient Tong: the record of book and document) and *Xīn tóngshū: yì wén zhì* (The Book of Modern Tong: the record of art and language), which also date back to 618 AD, indicate that the context of *xiànxué* had further expanded to cover calligraphy and the knowledge of ink and brush. By then the fundamental meaning of *xiànxué* was fixed. *Xiànxué* was known as *wénzìxué* (lexicology) around 1920. Traditionally it was part of philology but linguistic in nature.

Traditionally three features characterise the study of language in China, namely an emphasis on pragmatism, a belief of traditional wisdom and ethical standard, and a focus on the written script. These characteristics reflect the Chinese as a people and Chinese culture in general. Traditionally Chinese scholars had no intrinsic interest in the nature of Chinese as a language, especially the Chinese language that they were using. The study of *xiànxué* was conducted mainly for a practical reason, i.e. to acquire a more accurate interpretation of the ancient scripts for religious reason; for ethical and/or reasons of personal ideology, such as to follow the model of sages in the past, their teaching and

their way of life; and for practical purposes, such as to prepare official examinations, which were a major means for becoming an official. As a result the study of *xiànxué* was well developed in three major areas, namely *wénzìxué* (lexicology), which started around 800-300 BC, *xùngǔ* (scholium), which started around 100 BC – 500 AD, and *yīnyùnxué* (phonology), which started around 450-513 AD). In general little was done on the study of *wénfǎ* (grammar).

The earliest comprehensive publication in the study of Chinese grammar is known to be Ma Jian Zhong's (1889) *Mǎ shì wén tōng* (Ma's Understanding of Language). It can be taken as a point of departure in the history of the study of Chinese grammar, whose core concerns before this publication were *zhùzì* (similar but not identical to the notion of a particle) and *xūzì* (part of the function word). According to Wang (1964), this period can be roughly subdivided into three shorter periods, though some scholars have suggested four instead (cf. Wang 1959; Zhou 1980; and Xu 1996):

1. The period of *xùngǔ* (scholium) (100 BC – 500 AD)
2. The period of *zìjué* (self-realization) (500 AD – 1600 AD)
3. The period of *zōnghé* (comprehensive analysis) (1600 AD – 1800 AD)

(1) In the period of 'scholium', the study of language focused on the interpretation of individual characters, in particular those occupying clause-initial or clause-final position. Important publications in this period include *Kǒng ān guó zhù* (Kong An Guo's Commentary, in approximately 100 BC); *Shuō wén jiě zì* (Explaining Word, 121 AD); and *Zhèng xuán zhù* (Zheng Xuan's Commentary, in approximately 180 AD).

(2) In the period of 'self-realization', the major concerns of the study changed from individual characters to the grouping of particles (*zhùzì*) according to their functions and meanings, and also to the differences between individual particles within a given group¹. This change of concern can be seen in some important linguistics studies, for instance, Zhou Xing Si's *Qián zì wén* (A Text with a Thousand Words); Lau Xie's *Wén xīn diǎo*

¹ The reason why Wang (1964) calls this period 'zi jue' is not clear.

lóng (Crafting a Dragon in the Text) in approximately 500 AD; and Liu Zong Yuan's *Fù dù wén fū shū* (The Book of Fù Dù Wén Fū) in approximately 819 AD. In addition, many commentaries were published in this period most of which reorganised the subject matter and findings of publications from the period of scholium. Furthermore, some studies in this period began to show concern over the effect of context and the rhetoric of text, for instance, Liu Zong Yuan's *Fù dù wén fū shū* (The Book of Fù Dù Wén Fū) in 819 AD and Chen Kui's *Wén zé* (The rule of Text) in 170 AD.

(3) In the period of 'comprehensive analysis', the study of language concentrated on the nature and function of function words. According to Wang (1964:36), this period is called "comprehensive" because unlike the 'occasional' method adopted in the previous period of self-realisation, the studies in this period adopted a more comprehensive approach to analysing, regrouping and reconstructing the publications of the past. This change of focus can be found in the following publications: Hu Wei's (1592) *Zhù yǔ cí* (Function Words); Lau Qi's (1711) *Zhùzì biànlüè* (Identifying the Function Word) and Wang Yin Zhi's (1798) *Jīng chuán shì cí* (Explaining the Phrase in Traditional Works).

As mentioned above, *Mǎ shì wén tōng* (Ma's Understanding of Language) can be taken as a point of departure. From this publication onwards, the study of Chinese grammar underwent several changes. Generally speaking, two significant periods are recognised: (1) from 1889 to 1963, and (2) from 1963 to present. Both periods can be further divided into several shorter periods. The first period is characterised by the imitation of the grammatical descriptions of western languages, particularly Latin and English. As a result, the description of Chinese grammar looks extremely similar to that of Latin and English. For example, Ma Jian Zhong's (1889) *Mǎ shì wén tōng* (Ma's Understanding of Language) is obviously influenced by descriptions of the grammar of Latin, Lai Jin Xi's (1924) *Xīn zhù guóyǔ wénfǎ* (A New Grammar of Mandarin) and Yang Shu Da's (1930) *Gāoděng guóyǔ wénfǎ* (Advance Chinese Grammar) are influenced by prescriptive grammars of English.

The above approach towards Chinese grammar was criticised by Wang Li, in his articles ‘*Zhōngguó wénfǎ chū lùn*’ (A Preliminary Study of Chinese Grammar) published in 1936 and ‘*Zhōngguó wénfǎ zhōng de xìcí*’ (The Prepositional Phrase in the Grammar of Chinese) published in 1937. Other prominent critics of this approach included Lu Shu Shing and Gao Ming Kai. This leads to the second period of the study of Chinese grammar. Instead of imitating the description of western languages, this period is characterised by the adoption of particular theories of grammar, mainly the structuralist approach from the 1940s to the 1960s. Prominent structural studies of the grammar of Chinese during this period include Chao (1948, 1968), which were influenced by the American structuralist approach in general and by Leonard Bloomfield’s in particular. Wang (1955) adopted the notion of ‘three ranks’ from the Danish linguist Otto Jespersen and the notions of ‘endocentric construction’ and ‘exocentric construction’ from Bloomfield. Ding et al’s (1961) notion of ‘grammatical categories’ had an image of Otto Jespersen’s *Essentials of English Grammar*. Gao (1948) was greatly indebted to the French linguist Vendryès’s approach. In 1964 William Wong, another prominent figure in the study of Chinese grammar, introduced the generative transformational approach to the study of Chinese syntax. From 1965 to 1975 most linguists in China who adopted this approach followed Chomsky’s early position that deep structure is the sole semantic representation. Later, as Chomsky shifted his position several times, so did the generative transformational studies of Chinese syntax.

From 1976 onwards, although the formalist approach, including the transformational one, still lingered on, many linguists realised that it was unproductive for semantics to be separated from syntax in the study of language and a functional approach thus became more and more popular in the study of Chinese grammar. There are many of descriptions of the grammar of Chinese and accounts of specific parts of its grammar, which adopted a functional approach, for instance, Li and Thompson (1974, 1976, 1978, 1979, 1981); Tai (1975, 1982, 1984, 1986, 1989); Lu (1977, 1980, 1983, 1985); Tsao (1979, 1983); Chen (1984, 1986); Chu (1985, 1986); Chu and Chang (1987) and Ho (1993). Of those linguists who have adopted a functional approach to the grammar of Chinese, many have

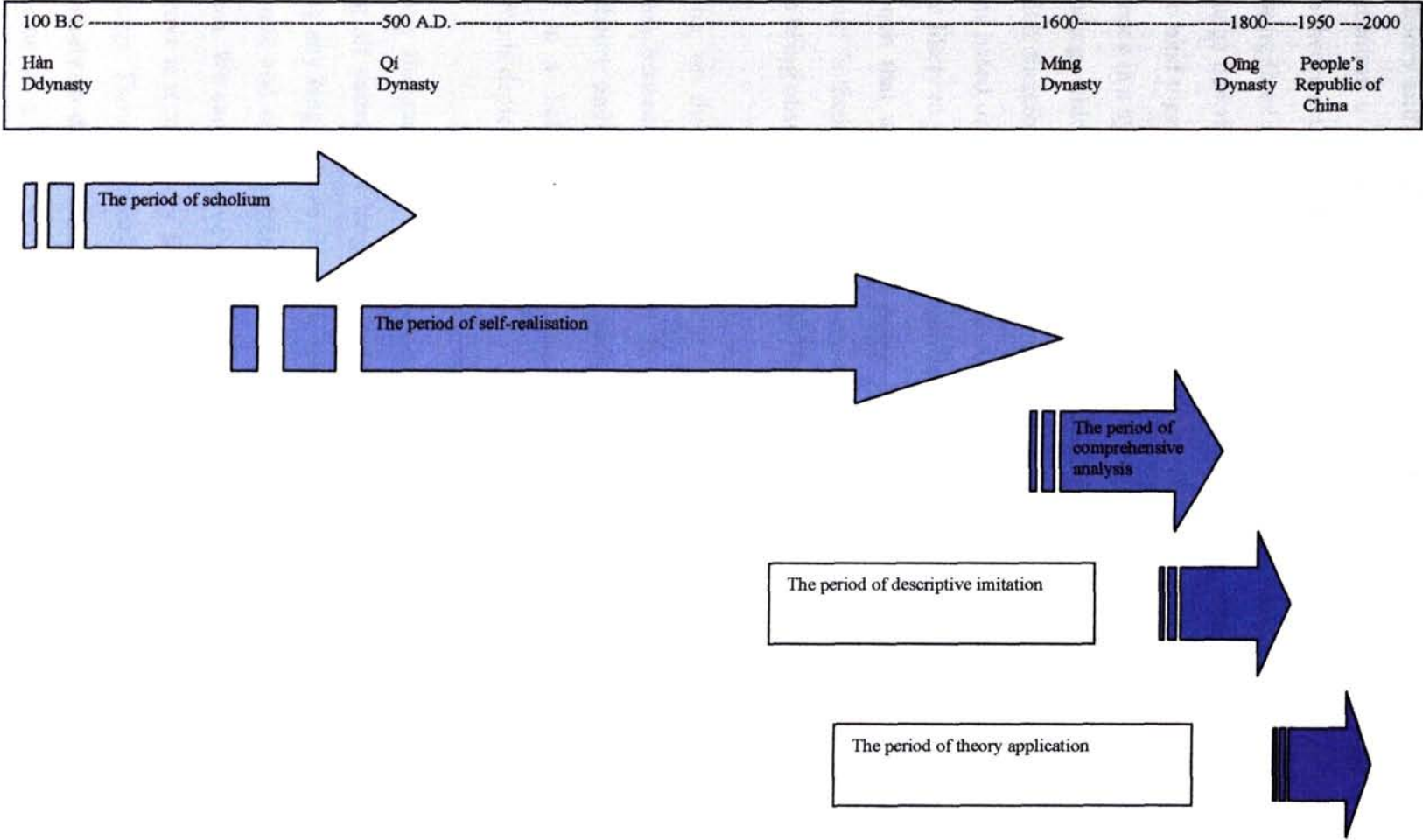
adopted the systemic functional approach, for instance, Hu (1984, 1990); Fang et al. (1987); McDonald (1998); Zhu (1996); and Halliday and McDonald (in press).

The study of Chinese grammar has been taken up by linguists in many countries, for instance, Tàì Tián Ché Fū in Japan; Charles N. Li, Sandra A. Thompson, W.A.C.H. Dobson, Harold Shadick and Charles E. Hockett in America; Yakhrntov in Russia; Göran Karlgren in Sweden; Bruno Schindler in Germany; Janusz Chmielewski in Poland; Edward McDonald in Australia; H.F. Simon, A.C. Graham, G.B. Downer and E.G. Pulleyblank in England. One of the most prominent figures among them is M.A.K. Halliday, the founder of systemic functional grammar². Halliday took his BA in Chinese language and literature at London University. After war service in India, he pursued his graduate studies in linguistics first at Beijing University and Lingnan University in China from 1947 to 1950, working with Wang Li (a prominent Chinese grammarian), and then at Cambridge University in 1955, where he obtained his Ph.D. with a thesis on *The Language of the Chinese Secret History of the Mongols* (1959). Halliday's other works on Chinese grammar include *Grammatical categories in Modern Chinese* (1956); with E. McDonald 'Metafunctional profile of the grammar of Chinese' in *Language Typology: a functional perspective* (in press). He has contributed a chapter or section on Chinese grammar to many other publications and/or quoted Chinese as examples for instance, Halliday (1995, 1997) and Halliday and Matthiessen (1999).

² The systemic functional approach has been adopted in the description of a number of languages, namely English, Chinese, French, German, Japanese, Tagalog, Vietnamese, Pitjantatjara and Telugu to name just a few. Systemic functionalism has been adopted among the linguist circles in Sydney, Melbourne, Adelaide and Perth in Australia; Beijing, Shanghai and Canton in China; Ottawa in Canada; and also in England, Denmark, Spain, Japan, India, Malaysia and Nigeria.

As in any other endeavour to divide history into periods, the division will inevitably be different when different criteria are applied. Due to the limitation of space, it will not be possible to go into further detail here. The five periods of the study of the grammar of Chinese identified are set against various dynasties of Chinese history in Figure 1.1. However, before sketching the theoretical map of the systemic functional grammatics, it seems inappropriate not to mention the two ‘big debates’ about the grammar of Chinese that took place in China in the 1950s, which involved as many as fifty linguists. The first debate was ignited by Gao’s (1953) article ‘*Quānyú hànyǔ de cílèi fēnbìé*’ (Concerning the category of phrase in Chinese), in which he suggested the indistinctness of noun, verb, adjective and adverb in Chinese. In this debate the majority of Chinese linguists opposed his suggestion. In 1955 an article entitled ‘*Hànyǔ de zhǔyǔ bīnyǔn wēntí*’ (The issue of subject and object in Chinese) ignited the second ‘big debate’. The issue of subject and object proved to be very controversial and no agreement has been reached. In fact, the issue is difficult, even impossible, to solve in a traditional, formal approach. However, I believe it can be solved, if a functional approach is adopted.

Figure 1.1: Five periods of the study of language in Chinese history



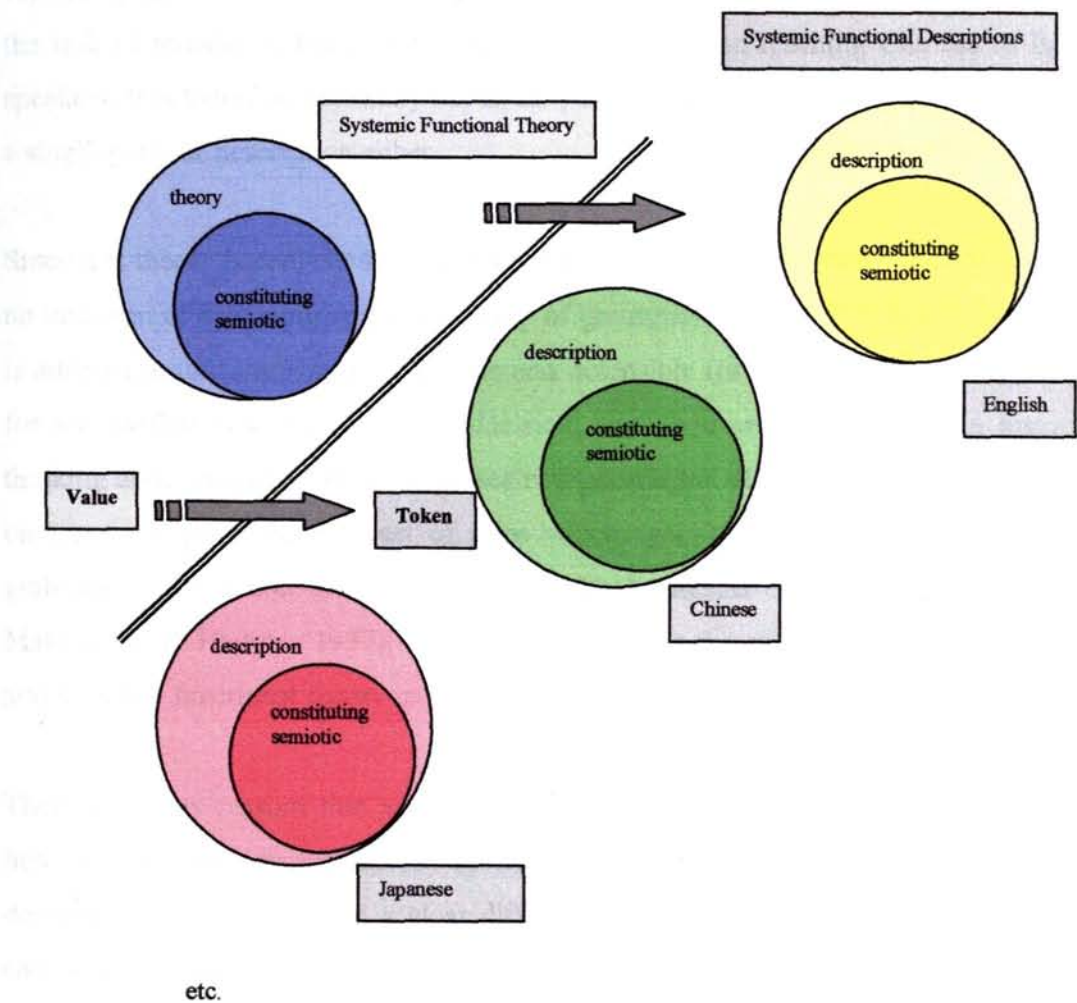
1.3 Theory and description

After presenting a historical map of the study of language in China in the previous section, a theoretical map of systemic functional grammatics will be sketched in this and the following three sections. The first step is to examine the relationship between theory and language description. A theory is distinct from an observable phenomenon. It is an attempt to bind together observations that we have of some particular aspect of the world of experience in a systematic way. The aim of such an attempt is to achieve some form of understanding which is construed as explanatory power and predictive capability. Explanation therefore is a matter of showing how things happen in accordance with deductions based on a premises of a theory while prediction is a matter of showing how things are likely to happen. In a certain sense, a theory determines how we interpret the phenomenon that we observe. To put it in another way, as Halliday (1996: 24) has pointed out: “a theory is a designed semiotic system, designed so that we can explain the processes being observed (and, perhaps, intervene in them).”

Description, on the other hand, “is a theoretical activity” (Halliday 1996: 24). The relationship between description and theory is one of realisation, in which description realises theory and “particular descriptions of languages realise the general theory of language in a Token-Value relationship” (Matthiessen & Nesbitt 1996: 61). This relationship is depicted in Figure 1.2.

In this way the success of a theory depends on how powerful and effective it is, in observing all patterns of language (not only overt patterns but also covert ones), in describing any language we choose to work on, in modelling language as an integrated, but dynamic and open, system of systems, and in explaining and predicting linguistic phenomena. We cannot prove such a theory by applying it to describe a language, but we can disprove it if the theory fails to explain or predict some significant phenomenon in that language. Though a theory cannot be proved, our belief in it increases when we apply it successfully to describe more languages, as Bayesian probability theory states: our beliefs come in degrees, and such degrees of belief, when rational, conform to the probability calculus. This idea will be elaborated in Section 1.5.

Figure 1.2: Relation between theory and language description
(adapted from Matthiessen & Nesbitt 1996:60)



1.4 Theoretical rationale

The present study is a theory-based linguistic investigation of the Chinese language, viewed in its own right and in comparison with English, in the hope of casting light on the task of translating between the two languages and on teaching Chinese to English speakers. It is therefore definitely not an all-purpose grammatical description but it is not a single-purpose description either.

Since it is theory-based, our first decision concerns which theory and why. Here we have no intention of devaluing any other theory of grammar, but merely to justify the one that is adopted in this study as a reasonable and defensible (or at least an alternative) choice for the present task. To make the decision, again we need to review the history of thinking about language. It encompasses two general but distinct theoretical perspectives on grammar, grammar as a set of rules which specify grammatical structures versus grammar as a resource which creates meaning by means of wording (for details, see Matthiessen & Halliday 1997). In this study we adopt the second perspective in general, and systemic functional theory in particular.

There are many reasons that justify our decision and we will mention three major ones here. (1) A clear distinction (in systemic functional grammar) between theory and description, which results in a clear differentiation between theoretical and descriptive categories, protects the description of the Chinese language from the risk of merely “refreshing the patterns of Chinese through an existing lens shaped for English” (cf. McDonald 1998: 3). Here the present study tries not to retrace the journey in the development of the study of the grammar of Chinese from the 1920s to the 1950s because there is no such thing as a ‘universal’ description of grammar. In contrast, the study is in search of a ‘universal’ grammatics, i.e. a theory of grammar, universal in the sense that the theory is general enough to be applied to most, if not all, languages and also flexible enough to allow room for modification and refinement. In this respect, systemic functional theory is designed as a theory of natural language, not intending for a particular language – though English in particular has been thoroughly explored in the past – but for all languages, or nowadays, for all semiotic systems. For example, it has

been adopted to analyse other semiotic systems such as music, painting, mathematics, graphs and statistics (Kross & van tesnksen 1995; Bell 1999; Lock 1999; McDonald 1999; O'Halloran 1999).

(2) The second reason for adopting systemic functional theory is a reaction to the inability of the traditional tripartite division of labour between syntax, semantics and pragmatics to provide an adequate, coherent, and comprehensive account of all three areas within a single description. The recent history of changing in formal grammars, including Chomsky's generative transformational grammar, evidences the fact that the linguists in that tradition also realise the imprudence and impracticality of the separation of syntax and semantics. As Hjelmslev (1943: 10) has pointed out: "the requirement of exhaustive description takes precedence over the requirement of simplicity." Systemic functional grammar, though complex at first glance, is an all-in-one theory of grammar (Halliday & Matthiessen 1999). It intends to bind together information from various areas of language traditionally believed to be disparate to the same underlying cause instead of 'outsourcing' each area to different subdisciplines such as syntax, semantics, pragmatics etc. As a result, even if it is not devised as an all-purpose grammar, it can be applied, and in fact it has already been applied, to many areas, as Halliday (1994) points out. This distinctive 'all-in-one' characteristic befits the purpose of the present study.

(3) The third reason is the strong text-based tradition of this approach, in contrast with an arm-chair theory supported by invented examples. In a text-based approach, a conscientious researcher has to account for all the linguistic phenomena revealed in the corpus, disregarding the fact that they may lead to a modification or even a rejection of the adopted theory. Examples invented by the researcher, though an acceptable practice if s/he is a native speaker of that particular language, may run the risk of intentional avoidance or unconscious neglecting of any counter examples of the theory. According to Hjelmslev (1943: 10), "the description (of the language) shall be free of contradiction (self-consistent), exhaustive, and as simple as possible." In addition, as McDonald (1998) has noted, the description of grammatical systems in Chinese depends very much on placing them in their discourse context because of the often indeterminate nature of the

boundaries between grammatical and discourse units and the economy in the use of grammatical marking in Chinese. For all these reasons, this study adopts the perspective of systemic functional theory.

1.5 Systemic Functional Grammar (SFG)

Systemic functional grammar (SFG) is built on, inspired by, and contrasted with the studies of some preceding anthropologists, psychologists, linguists and philosophers. The most relevant notions include de Saussure's distinction between the syntagmatic and paradigmatic axes; Malinowski's notion of 'context of situation'; Firth's work on prosody and the concept of 'system'; Hjelmslev's notion of language as process; the Prague School's notion of Theme and Rheme; Bühler's three 'functions' of language, i.e. expressive, conative, and referential; Boas's concept of 'language as a social system'; and Whorf's emphasis on the role of language in culture. These concepts provide the theoretical context of SFG. However, it is beyond the scope of the present study to go into details here. Instead, only the central notions of SFG, which serve as the theoretical background of the present study, will be reviewed in this section.

Systemic functional grammar is a grammatics, i.e. a theory of grammar. In contrast with the traditional (prescriptive and descriptive) and formal grammar, SFG sees language as a meaning potential – it is what the speaker of the language can do linguistically. Grammar is considered in SFG to be a resource for making meaning through wording, rather than a set of rules. According to Halliday (1985: 30, my bolding), SFG is

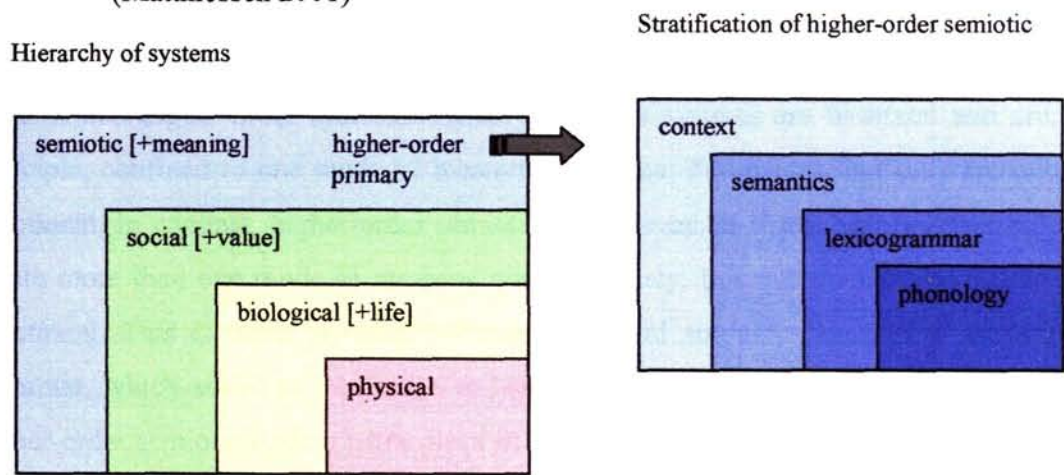
... an analysis-synthesis grammar based on the **paradigmatic** notion of choice.... It is a **tristratal** construct of semantics (meaning), lexicogrammar (wording), and phonology (sound). The organising concept at each stratum is the paradigmatic '**system**'... Options are realised as **syntagmatic constructs** or structures; a structure is a configuration of functional elements. ... A text in systemic-functional grammar is an **instantiation** of the system.

In the following sections, the above concepts will be elaborated in more detail.

1.5.1 Semiotic system, stratification and realisation

SFG is a general theory of semiotic systems. Language is only one type of semiotic system, though it is of the highest order of complexity (Halliday 1995). Figure 1.3 shows the stratification of language as a higher-order semiotic system located in a hierarchy of systems.

Figure 1.3: Theoretical modeling of language as social-semiotic system (Matthiessen 2001)



The systems in the hierarchy of systems constitute different phenomenal realms. They are ordered in increasing complexity (Halliday & Matthiessen 1999: 507-511). There are four orders of system, i.e. physical systems, biological systems, social systems and semiotic systems. Physical systems are systems of the first order, ranging in size from subatomic particles to the entire universe. All of them are subject to the laws of physics. Biological systems are systems of the second order, second in the sense that they are physical systems with an additional property of ‘life’ and are thus self-replicating. Social systems, in turn, are systems of the third order, third in the sense that they are biological systems with an additional property of ‘value’. Among other things, they are organised as social groups according to some form of division of labour. Lastly, semiotic systems are systems of the fourth order, fourth in the sense that they are social systems with an additional property of ‘meaning’.

Language as a semiotic system embodies simultaneously properties from all four orders in the hierarchy of systems. It is a physical system, studied in the field of acoustic phonetics; a biological system, studied in the fields of neurolinguistics and articulatory/auditory phonetics; and a social system, studied in the field of sociolinguistics. As a type of semiotic system, the key property of language is therefore 'meaning', modeling as a system, or more accurately a network of systems. To be able to make meaning, language has to be stratified into at least two strata, namely those of content and expression.

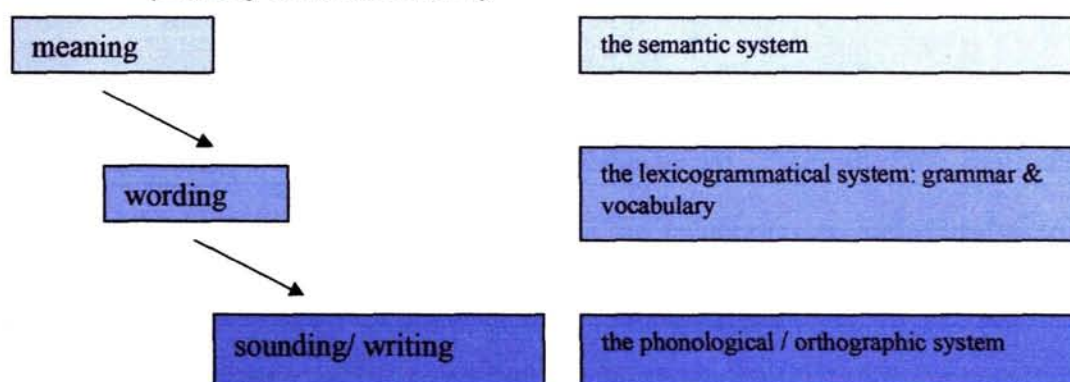
Halliday (1995) distinguishes two orders of semiotic system, namely primary semiotic systems and higher-order systems. Primary semiotic systems are bi-stratal and are, in principle, confined to one mode of meaning at a time; this means that they are micro-functional. In contrast, higher-order semiotic systems are tri-stratal and they are able to create more than one mode of meaning simultaneously; this means that they are meta-functional. This is made possible because of a third stratum, namely the stratum of grammar, which seems to be unique to language. The change from the primary to the higher-order semiotic system takes place in ontogenesis (a child's learning of the system of grammar in the language he is learning) and seems also to have taken place in phylogenesis (the evolution of the system of grammar in the language of the species).

In a primary semiotic system the two strata of content and expression are typically related both arbitrarily and naturally. In a higher-order semiotic system the content stratum is further stratified into semantics and lexicogrammar. The prototypical higher-order semiotic system is language, in contrast with child language or primitive proto-language.

The relation between any two adjacent strata in a higher-order semiotic system is not one of constituency but of realisation; meaning is realised as wording which, in turn, is realised as sounding/writing. In this way language is perceived as a multiple coding system. Language production is thus taken as a process of coding a message that starts from meaning and goes through the process of wording and ends up with sounding or writing. Language comprehension, on the other hand, is a process of decoding the

message, from sound/writing to meaning via wording. The notion of realisation is shown in Figure 1.4.

Figure 1.4: Stratification and realisation of a linguistic system
(Halliday & Hasan 1976: 5)



Above the semantics stratum, as shown in Figure 1.3, there is the stratum of context. This refers to the context of culture and the context of situation. This stratum is beyond the domain of language. Halliday (1964, 1975, 1976) proposes three aspects of the context of situation, namely field, tenor and mode. The field of discourse refers to “what is going on”, concerning the nature of the social process, as institutionalised in the culture. The tenor of discourse concerns “who are taking part”, specifying the role and status relationships of the interactants. The mode of discourse identifies “what the text is doing”, referring to the rhetorical functions and channels assigned to language in the situation. Field thus relates to the ideational meanings of a situation, tenor to its interpersonal meanings and mode to its textual meanings. (The ideational, interpersonal and textual metafunctions are discussed in the next section.) In this way, the concept of a semiotic system encompasses not only meanings but also the environment in which meanings are exchanged. As Halliday (1973: 64) has pointed out

... the total range of meanings that is embodied in and realised through the language system is determined by the context of culture – in other words by the social structure.

Given a certain configuration of these features, a corresponding set of linguistic features will be anticipated and these constitute a text’s register. This anticipation facilitates and constrains the interpretation of the text (for details, see Hasan 1983; Halliday & Hasan 1985; Martin 1985; Matthiessen 1993). The relationship between the context of situation and different modes of meaning are summarised in Table 1.1.

Table 1.1: Relation of the context of situation to the modes of meaning
(Halliday 1985b: 26)

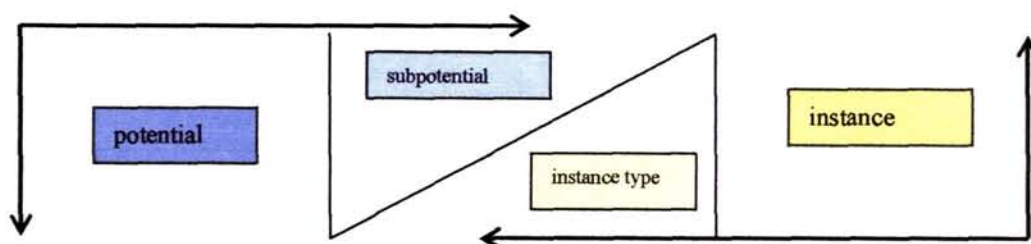
situation: feature of the context	realised by	text: functional component of semantic system
field of discourse (what is going on)		experiential meanings (transitivity, etc.)
tenor of discourse (who are taking part)		interpersonal meanings (mood, modality, person etc.)
mode of discourse (role assigned to language)		textual meanings (theme, information, cohesive relation)

1.5.2 System and instance

In SFG language is seen as a “potential” for creating meaning, whereas text is ‘actual’ acts of meaning, i.e. what language users can mean and what they mean in a given instance. The relationship between language and text is one of actualisation or instantiation; a text in a particular context of situation instantiates or actualises the linguistic system in its context of culture. As Halliday (1991) has pointed out, the relation between them is analogous to the relation between the climate and the weather in that language is an accumulation of instances of text, just as climate is an accumulation of instances of weather. We can observe the weather of a particular area over a period of time and generalise our observations in terms of a weather pattern. In the same way we can identify text patterns by analysing a number of texts. In this way we can arrange the language (as a potential), an observed pattern (as subpotential/instance types, depending from which end we approach) and the text (as an instance) on a cline, namely the cline of instantiation. We can approach the cline from either end. If we come from the end of potential and move towards the instance, we find in between clusters of subpotential, the

“subpotential”. If we start from the other end, we find patterns of instance, the “instance types”. This notion of instantiation can be represented diagrammatically as in Figure 1.5.

Figure 1.5: Cline of instantiation (Halliday 1997)



Language as a potential, i.e. as social semiotic potential, meaning potential and wording potential, is represented systemically in the form of a network of options, or choices, i.e. alternative possibilities. In this way a text as an instance is meaningful because it represents certain choices in contrast with alternative possibilities. As a result, each instance keeps alive the potential, reinforcing it, challenging it and/or changing it. The notion of system as the central category for representing paradigmatic organisation at each stratum will be taken up again in Section 1.4.4. At this point we can integrate the notion of stratification with the notion of instantiation to produce an instantiation/stratification matrix as shown in Table 1.2. This matrix shows the total systems of language in context distributed along the hierarchy of stratification and extended along the cline of instantiation. The present study will focus on two stratal systems, those of semantics and lexicogrammar which will be investigated as systemic potential by relating this potential to their instantiation in texts. Such an investigation will at the same time shed light on the nature of these texts.

Table 1.2: Instantiation/stratification matrix
(adapted from Halliday 1997: 48 and Matthiessen 2001: 48)

STRATIFI- CATION	INSTANTIATION		←	→
	potential (system)	subpotential (subsystem)	instance type	instance
context	context of culture: “the culture” as social semiotic system: networks of social semiotic features constituting the systems-&-processes of the culture; defined as potential clusters of values of field, tenor, mode	subculture/ institution: networks of regions of social semiotic space	situation type: set of like situations forming a situation type	situation: instantial values of field, tenor & modes; particular social semiotic situation events, with their organisation
semantics	semantic system: meaning as potential; networks of different modes of meaning * to be elaborated in Section 1.5.3 and 1.5.4	register: networks of typological regions of semantic space	text type: a set of like texts (meanings) forming a text type	[text as] meaning: semantic selection expressions (features from passes through semantic networks), and their representation as meanings particular texts, with their organisation
lexicogrammar	lexicogrammatical system: wording potential; networks of wording realising different modes of meaning * to be elaborated in Section 1.5.3 and 1.5.4	[register]: networks of typological regions of semantic space	[text type]: a set of like texts (meanings) forming a text type	[text as] wording: lexicogrammatical selection expressions (features from passes through grammatical networks), and their manifestation as wordings particular texts, spoken or written, with their organisation
phonology/ graphology/ sign				

1.5.3 Metafunction

As mentioned in Section 1.5.1, language is a higher-order semiotic system which is able to create more than one mode of meaning simultaneously. Halliday (1979) identifies four modes of meaning, namely experiential, interpersonal, textual and logical. Logical meaning however is systemically and structurally associated with experiential meaning, and is thus grouped under the heading of ideational (see Halliday 1985/1994, 1997). These three modes of meaning, i.e. ideational, interpersonal and textual, are referred to in SFG as metafunctions.

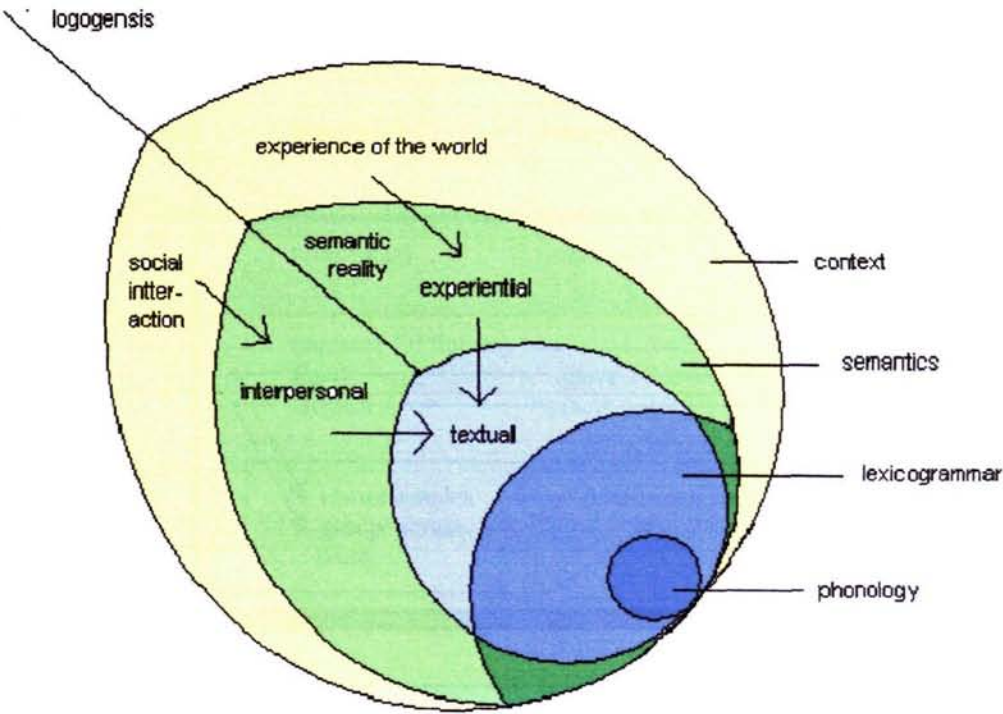
The ideational metafunction concerns our experience of the world around us and inside us, whereas the interpersonal metafunction concerns the interaction between speaker and listener(s) or between writer and reader(s). In other words these two metafunctions orient themselves towards the material world and the social world respectively and both concern phenomena that are non-linguistic in nature (Matthiessen & Halliday 1997). These two metafunctions call a third one into being, a metafunction which enables the presentation of ideational and interpersonal meanings as information that can be interpreted by speaker and addressee(s). It concerns the creation of text/discourse, the flow of meaning and the phenomena that are linguistic in nature and is known as the textual metafunction. All these three modes of meaning are simultaneously realised in any major clause as text unfolds (see Halliday 1985).

Halliday (1979) hypothesised that these different modes of meaning engender different modes of expression, which in turn are manifested in different media of expression. In general the experiential metafunction engenders constituency but it does not assign any value to the relative order of the configurations; relative order is deployed by the textual metafunction to signify thematic status. In contrast, the interpersonal metafunction creates a pitch prosody but it does not assign any value to the location of the major pitch movement, namely the tonic; the placement of the major pitch movement is deployed by the textual metafunction to signify information status. These correlations between metafunctions, modes of expression and modes of medium are shown in Table 1.3 and the relation between metafunction and stratification is presented in Figure 1.6.

Table 1.3: Modes of meaning, modes of expression and mediums of expression in Chinese

mode of expression		mode of meaning				
		ideational		interpersonal	textual	
		logical	representational		information status	thematic status
particulate	serial	segmental marking; sequence suffusion: extension over the whole clause				
	configur- ation		constituency: segmentation			
prosody				mainly intonation suffusion: extension of pitch movement; segmental marking as negotiator		
wave					intonation prominence: location of major pitch movement	mainly sequence prominence: relative order of the constituents; segmental marking after some topical theme
		mode of expression				

Figure 1.6: Relation between stratification and metafunction



1.5.4 Rank, axis and delicacy

Language as a higher-order semiotic system is stratified into several strata while each stratum in turn is organised internally through a series of contextualisations, resulting in a hierarchy of units. The number of strata is fixed for all languages, whereas the number of ranks within a given stratum is not. These units are related through the relation of constituency, i.e. through a part-whole relation. To put it in another way, the highest-ranking unit consists of units of the rank immediately below, which in turn consist of units at the next rank below, and so on. At the lexicogrammatical stratum of Chinese the rank scale is clause – group/phrase – word - morpheme, in which a clause consists of groups/phrases, and a group/phrase consists of words. At the semantic stratum the rank scale for the ideational metafunction is (event-line) – sequence – figure – element; the rank scale for the interpersonal metafunction is exchange – move – (act); and the rank scale for the textual metafunction is text – (chain) – message – information chunk. While meaning is realised by wording, the constituents at different ranks of the semantic stratum are realised by the constituents at different ranks of the lexicogrammatical stratum as shown in Figure 1.7.

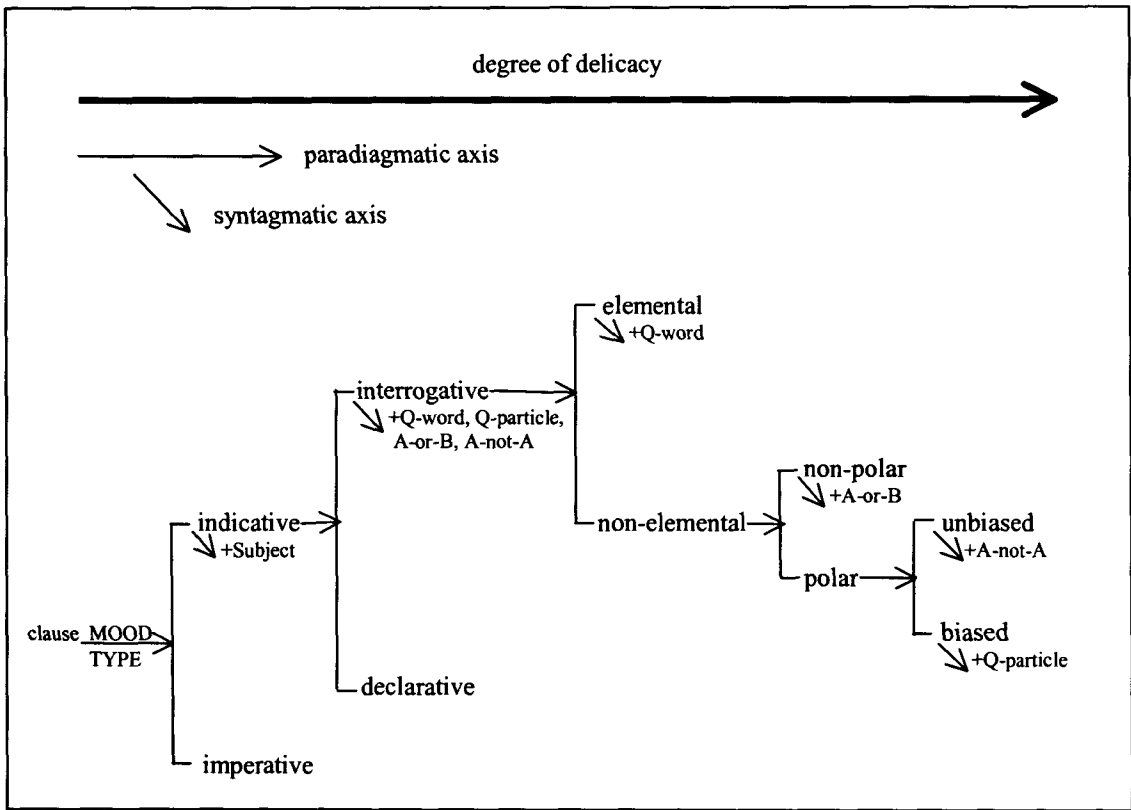
Figure 1.7: Realisation at different ranks in the three metafunctions

<div>metafunction</div> <div>stratification</div>	ideational	interpersonal	textual
semantic stratum	(event-line) sequence (of figures) figure element	exchange move (act)	text (chain) message information chunk
lexicogrammatical stratum	clause simplex group/ phrase word	clause complex	
phonology			

At each rank every unit is organised into a hierarchy of axes, namely the paradigmatic and syntagmatic axes. The two axes represent two modes of grammatical organisation. This axial model distinguishes SFG from traditional grammar and formal grammar. The paradigmatic mode of organisation is taken as primary and fundamental in the sense that it is the organisation of grammatical resources into options available for realising meanings. In contrast, the syntagmatic mode is secondary and represents the organisation of structures and items, i.e. wordings as realizations of paradigmatic specifications. These two modes of organisation form a hierarchy because the former defines the overall organisation of the grammar of a language while the latter specifies locally in the environment of the various terms of the systemic axis. This bifurcation into two modes of axial organisation makes it possible for a system to relate both to what the system realises (the stratum above) and to what it is realised by (the stratum below).

The paradigmatic axis is organised along the cline of delicacy. In a diagrammatic representation the cline of delicacy extends from the left (the most general systemic contrasts) to the right (the most delicate contrasts). The depth of description towards the right depends on the purpose and/or intended application of the description. Figure 1.8 shows the relation of axis and delicacy in the system of MOOD in Chinese.

Figure 1.8: System network, axis and delicacy in the system of MOOD



At this point we can intersect rank and metafunction to produce a comprehensive function-rank matrix for each stratum as in Table 1.4. The grammatical function-rank matrix and the semantic function-rank matrix are further elaborated in Tables 1.5 and 1.6 respectively. Here we can locate the core concerns of the present research. The coloured cells indicate the systems that will be explored or mentioned in this study. The empty cells on the other hand show the potential areas of semantic and grammatical systems yet to be explored.

Table 1.4: System network and rank in the environment of the instantiation and stratification matrix (adapted from Halliday 1997: 50)

STRATIFI- CATION	INSTANTIATION		→	←																	
		System	subpotential (subsystem)	instance type	instance																
context	context of culture		subculture / institution	situation type	situation																
semantics	semantic system semantic function-rank matrix (see Table 1.5)		register	text type	text [as meaning]																
	<table><tr><td></td><td>idea.</td><td>interp.</td><td>text.</td></tr><tr><td>text</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>						idea.	interp.	text.	text											
	idea.	interp.	text.																		
text																					
lexico- grammar	grammatical system grammatical function-rank matrix (see Table 1.6)		[register]	[text type]	text [as wording]																
	<table><tr><td></td><td>idea.</td><td>interp.</td><td>text.</td></tr><tr><td>clause</td><td></td><td></td><td></td></tr><tr><td>group</td><td></td><td></td><td></td></tr><tr><td>word</td><td></td><td></td><td></td></tr><tr><td>morpheme</td><td></td><td></td><td></td></tr></table>						idea.	interp.	text.	clause				group				word			
	idea.	interp.	text.																		
clause																					
group																					
word																					
morpheme																					

Table 1.5: Semantic systems to be explored in the function-rank matrix for Chinese

rank	ideational	interpersonal	textual
text			TEXTUAL CONTINUITY; TEXTUAL RELATIONS; TEXTUAL DEVELOPMENT
	FIGURE	SPEECH FUNCTION	TEXTUAL STATUS TEXTUAL PROMINENCE

Table 1.6: Lexicogrammatical systems to be explored in the function-rank matrix for Chinese

rank	[class]	complexes	ideational		interpersonal	textual		
			logical			experiential		(cohesion)
clause		clause-	INTER-DEPENDENCY & LOGICO-SEMANTIC RELATION		TRANSITIVITY	MOOD; MODALITY; POLARITY ASSESSMENT	THEME; VOICE	REFERENCE; ELLIPSIS & SUBSTITUTION; CONJUNCTION
phrase	[preverbal]	phrase-						
group	[verbal]	group-			ASPECT PHASE			
	[nominal]							
	[adverbial]				CIRCUMSTANCE	MODALITY COMMENT	CONJUNCTION	
word								
information unit		information unit complex					INFORMATION FOCUS	
			complexes	simplexes				

1.6 Semantics as discourse semantics

One of the major concerns of the present study is to extend the clause grammar towards discourse semantics. Several disciplines have studied discourse/text. They represent different points of interest, originate from different theoretical traditions and thus adopt different approaches towards the subject matter. Different approaches to discourse analysis are therefore reviewed in this section.

1.6.1 Pragmatic approaches

By pragmatic approaches I mean a certain group of theories from various traditions, generally including speech act theory in the tradition of linguistic philosophy, conversational analysis (CA) as part of ethnomethodology, as well as cooperative and politeness theory. These three approaches however do not define a systemic domain of study; there are gaps yet to be filled. As Halliday & Matthiessen (1999: 12) have pointed out, “pragmatics appears as another name for the semantics of instances.” Or as Matthiessen (p.c.) has said, pragmatics is “remedial semantics”, covering areas of meaning not dealt with by formal semantics. As far as semantics is concerned the focus is largely on the interpersonal metafunction. Pragmatics may be characterised as in Table 1.7.

Table 1.7: Pragmatics as a “remedial semantics”

	traditional/formal semantics	pragmatics
metafunction	ideational	interpersonal (e.g. speech act theory) textual (e.g. reference, topicality, focus)
instantiation	potential – semantic system	instance – text (language in use) (e.g. CA)
stratification	de-contextualised	contextualised

Since general reviews of these alternative approaches are available, we will not discuss these any further here (see Coulthard 1977; Hudson 1980; Brown & Yule 1983; Levinson 1983; Mey 1993; Nunan 1993).

1.6.2 Discourse analysis: the Birmingham tradition

Discourse analysis in the Birmingham tradition deserves closer attention here because of its functional orientation. In this section I will briefly mention four discourse structural models in this tradition.

A very influential model was proposed on the basis of a study of classroom discourse by Sinclair and Coulthard (1975), *Towards an Analysis of Discourse: the English used by teachers and pupils*. In this study Sinclair and Coulthard set up two levels of analysis, namely non-linguistic organisation and discourse, both of which are distinct from the grammatical level. There are several ranks at these two levels, as at the grammatical level. The level of non-linguistic organisation of classroom discourse, with ranks of course, period and topic, is of little interest here and will not be discussed further. At the discourse level there are five ranks, namely act, move, exchange, transaction and lesson; these are shown in Table 1.8.

Table 1.8: Levels and ranks in the model by Sinclair & Coulthard (1975: 24)

level	non-linguistic organisation	discourse	grammar
rank	course period topic	LESSON TRANSACTION EXCHANGE MOVE ACT	sentence clause group word morpheme

At the discourse level a total of twenty-one types of act have been identified, which make up three major classes of move, namely [opening], [answering] and [following-up]. These three classes of move in turn occupy places in the structure of exchange. In this way the exchange rank is used to handle the potential sequence of move types through a multivariate structural formula. There are three structural elements of exchange occurring in an ordered sequence, i.e. initiation ^ (responses) ^ (feedback), which are realised by the major classes of move, namely [opening], [answering] and [following-up]

respectively. There are two types of exchange, viz. free exchange (those which function as informing, directing, eliciting and checking) and bound exchange (those with no initiating move, or with no head). There are two further ranks above the exchange, namely lesson and transaction, which are specific to classroom texts. Though their analysis is based on classroom discourse, Sinclair and Coulthard believe that there are three major acts, ‘elicitation’, ‘directive’ and ‘informative’, which probably occur in all forms of spoken discourse. According to Sinclair and Coulthard, the relation between discourse and grammar is as follows:

Grammar is concerned with the *formal* properties of an item, discourse with the *functional* properties, with what the speaker is using the item for. The four sentence types, declarative, interrogative, imperative, and moodless, realize twenty-one discourse acts, many of them specialized and some quite probably classroom-specific. (Sinclair & Coulthard 1975: 28; italics in original)

They do not have a stratum of semantics but attempt to relate the discourse categories directly to grammatical categories via situational categories as shown in Table 1.9.

Table 1.9: Discourse, situational and grammatical categories
(Sinclair & Coulthard 1975: 29)

discourse categories	situational categories	grammatical categories
informative elicitation directive	statement question command	declarative interrogative imperative

The second model to be reviewed is by Burton (1978). Instead of classroom discourse, she worked on drama and conversational texts and found that the notion of (feedback) or [following-up] in Sinclair and Coulthard’s model hardly ever occurs. She therefore proposes a bipartite structure, namely [opening] and [answering] moves, with two subtypes of [answering] move, i.e. [supporting] and [challenging]. Burton (1978:148) relates these to topic development by suggesting that:

... as Supporting Moves function to facilitate the topic presented in a previous utterance, or to facilitate the contribution of a topic implied in a previous utterance, Challenging Moves function to hold up the progress of that topic or topic-introduction in some way.

There are three types of [opening] moves, namely an [opening] move that is “essentially topic-carrying items which are recognisably “new” in terms of the immediately preceding talk”; a [bound-opening] move that occurs after a [supporting] move and functions to “enlarge the Discourse Framework by extending the ideational-textual aspect of the original Opening Move”; and a [re-opening] move that occurs after [challenging] and which “re-instates the topic that the Challenge either diverted or delayed.” (Burton 1978: 146-150)

Unlike in Sinclair and Coulthard’s model, there are only three ranks at the discourse level in Burton’s model, viz act, move and exchange. Her exchange structural formula is shown in Table 1.10.

Table 1.10: Exchange structural formula in the model by Burton (Burton 1978: 152)

Initiation ^	Responses ^	(Re-Initiation) ^ (R) n) n) n)
[opening]	[supporting] [challenging]	[bound-opening] [re-opening]

The third model was proposed by Coulthard and Brazil (1979, 1981). This model also extends Sinclair and Coulthard’s model but presents a somewhat different exchange structure formula as shown below:

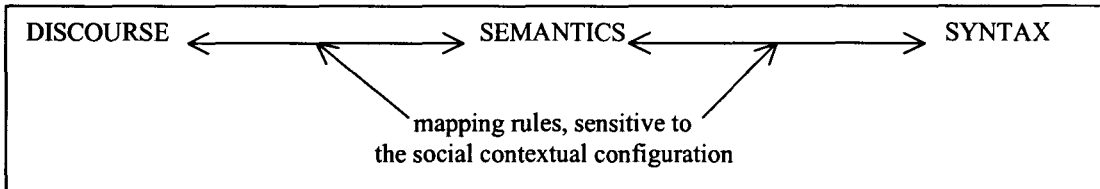
Figure 1.9: Exchange structure formula in the model by Coulthard and Brazil (Coulthard & Brazil 1979: 40)

(Open) ^ Initiation ^ (Re-I) ^ Response ^ (Feedback) ^ (F) ^ (Close)
--

The last model was proposed by Butler (1982, 1985). His model is based on Burton’s model but he amends and extends it. The most important difference between his model

and Burton's is that he introduces a semantics level that lies between discourse and syntax. The three levels are related as shown in Figure 1.10.

Figure 1.10: Discourse, semantics and syntax (Butler 1982: 227)



Other important work in this tradition includes Berry (1977, 1981a, 1981b, 1981c) and Fawcett et al's (1988) systemic flowchart. As Martin (1992: 46) has pointed out: "the basic strategy of this tradition is to treat sequences of interacts as multivariate structures, positing a rank scale at the level of discourse." Generally speaking, this tradition of discourse analysis is closely related to the systemic-functional approach; both approaches are interested in conversational structure and attempt to relate the description of the structure of conversation to that of other units, ranks, levels and structures of language (Eggs 1990: 48); and both have similar premises underlying their general theoretical position by

- (1) interpreting language from a functional point of view;
- (2) adopting Halliday's grammatical notions such as rank, realisation and delicacy;
and
- (3) setting up a separate stratum for the description of discourse (semantics) distinct from the (lexico-)grammatical stratum.

At this point we can move on to review the systemic functional approach to discourse semantics.

1.6.3 The Systemic Functional approach

A distinctive systemic functional approach to discourse begins with Halliday's (1977/1984) publication, *Language as Code and Language as Behaviour: A Systemic-Functional Interpretation of the Nature and Ontogenesis of Dialogue*. Halliday (1984: 6) asserts that:

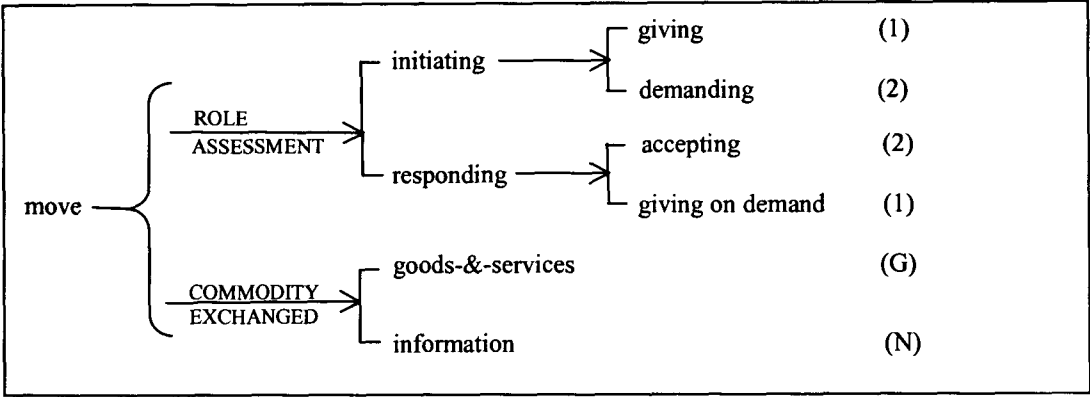
... in systemic theory the process of dialogue is treated as a shared potential and described as a 'system', or network of choices, in terms of the role relationships set up by the speaker for himself and the hearer and the encoding of these in the semantics of language.

Halliday points out the necessity of a separate but related interpretation, represented by a different system at each stratum, namely social context, semantic and lexicogrammar. And the three networks of systems link up with each other through the process of realisation, i.e. coding and recoding:

... at the social-contextual level, the dynamic of dialogue consists in assigning, taking on, and carrying out a variety of interaction roles. These roles are themselves defined by a small number of very general semiotic processes, and it is these that we shall take as our point of departure. The choices that are open to a speaker within this range of interpersonal options are then coded in the semantic system, as 'speech functions' of statement, question and the like; and these in turn are recoded in the grammatical system, as categories of mood. (Halliday 1984: 11)

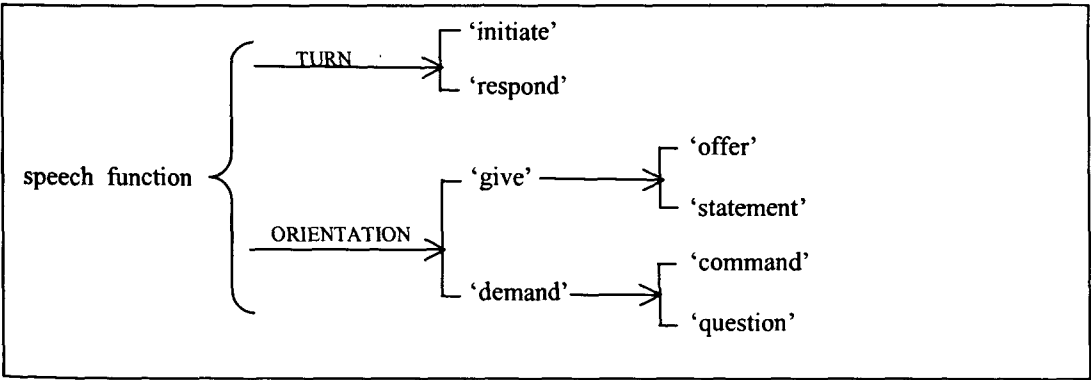
At the stratum of social context stratum dialogue is interpreted as a process of exchange involving two variables, namely (1) the nature of the commodity that is being exchanged, i.e. [information] or [goods & services], and (2) the roles that are defined by the exchange process, i.e. [giving] and [demanding] in an initiating turn and [accepting] or [giving on demand] in a responding turn as shown in Figure 1.11.

Figure 1.11: System of dialogue at the level of social context (Halliday 1984: 12)



At the stratum of semantics, “the options in the exchange process are encoded as meanings in language” (Halliday 1984: 13). It is an intermediate level of coding: realising the social-contextual options of role assignment and commodity exchanged on the one hand, and realised by the grammatical options of mood on the other. The system at this level is as shown in Figure 1.12.

Figure 1.12: System of dialogue at the level of semantics (Halliday 1984: 13)



The notion of congruence is important in the process of realisation in which “a “congruent” realisation is the one which can be regarded as typical – which will be selected in the absence of any good reason for selecting another one” (Halliday 1984: 14). As regards the notion of congruence, Halliday lists eight congruent realisations for the social-contextual options, as in Table 1.11.

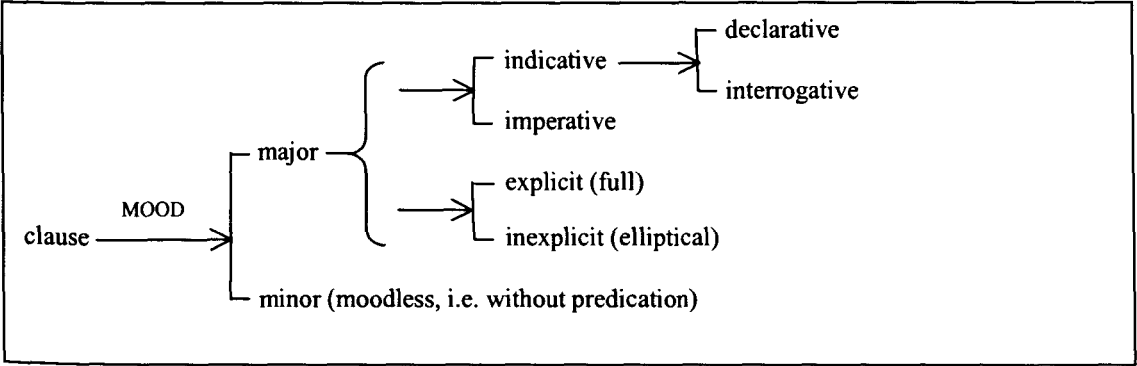
Table 1.11: Congruent semantic realisation of the options at the social-contextual stratum (Halliday 1984: 14)

move in dialogue:	speech function by which typically encoded
(I1G)	'initiate:offer'
(I1N)	'initiate:statement'
(I2G)	'initiate:command'
(I2N)	'initiate:question'
(R2G)	'respond (to offer):accept (command in response)'
(R2N)	'respond (to statement):acknowledge (question in response)'
(R1G)	'respond (to command):comply (offer in response)'
(R1N)	'respond (to question): answer (statement in response)'

On the other hand, Halliday also points out the possibility of non-congruent forms in real life because “the resulting discourse easily becomes boring’ and ‘many of the more delicate distinctions within any system depend for their expression on what in the first instance appear as non-congruent form” (Halliday 1984: 14).

At the lexicogrammatical level “the meanings are, in turn, coded as ‘wording’: that is as selections of options in the lexicogrammatical system” (Halliday 1984: 15). Halliday presents the system at the lexicogrammatical level as in Figure 1.13.

Figure1.13: System of dialogue at the level of lexicogrammar (Halliday 1984: 15)



The system of MOOD is basically the system of mood plus the simultaneous options of full and elliptical clauses to realise the initiating turn and the responding turn respectively in the system of SPEECH FUNCTION at the semantic stratum. The congruent realisations of various speech functions are summarised in Table 1.12.

Table 1.12: Congruent lexicogrammatical realisation of semantic speech functions (Halliday 1984: 15)

speech function	mood by which typically encoded
initiate	full
response	elliptical (or minor)
offer	(various: no congruent form)
statement	declarative
command	imperative
question	interrogative

In a later work, Halliday (1985/1994) further clarifies the grammatical basis for the distinction between the exchange of information, i.e. proposition, and the exchange of goods-&-services, i.e. proposal, through a description of the notion of modality. He notes that:

... modality refers to the area of meaning that lies between yes and no – the intermediate ground between positive and negative polarity. What this implies more specifically will depend on the underlying speech function of the clause. (1) If the clause is an ‘information’ clause (a proposition, congruently realized as indicative), this means either (i) ‘either yes or no’, i.e. ‘maybe’; or (ii) ‘both yes and no’, i.e. ‘sometimes’; in other words, some degree of probability or of usuality. (2) If the clause is a ‘goods-&-services’ clause (a proposal, which has no real congruent form in the grammar, but by default we can characterize it as imperative), it means either (i) ‘is wanted to’, related to a command, or (ii) ‘wants to’, related to an offer; in other words, some degree of obligation or of inclination. We refer to type (1) as MODALIZATION and to type (2) as MODULATION (Halliday 1994: 356).

In this way Halliday has established the most fundamental system of SPEECH FUNCTION with a solid grammatical basis in language. The next avenue of research is obviously to develop the system further in delicacy so that more specific speech functions (rhetorical modes of speech function in Halliday's terms) can be accounted for.

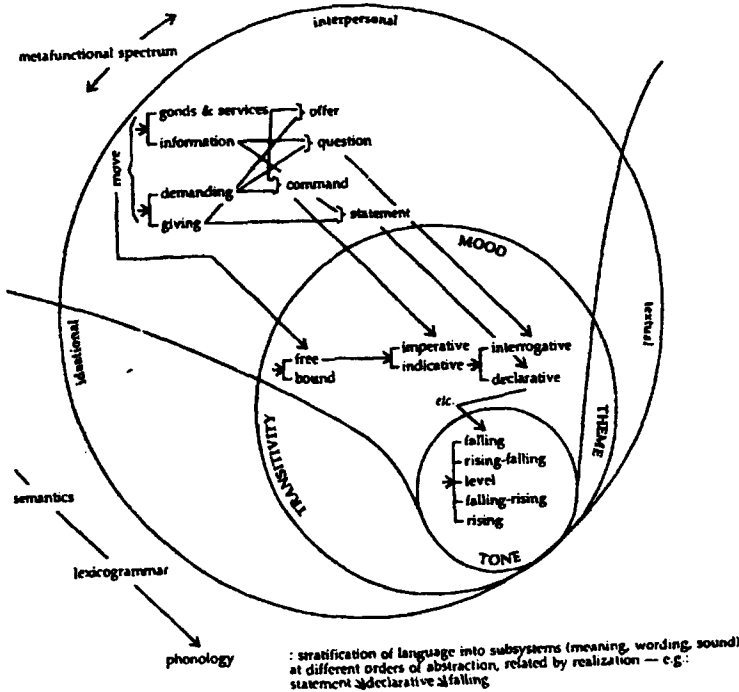
1.6.3.1 Speech function, move and turn

At this point there are three basic notions which need to be clarified, namely speech function, move and turn. In Halliday (1984), the fact that the clause is the point of entry to the system of MOOD at the lexicogrammatical stratum is clearly shown in Figure 1.13. What is not clear is the status of speech function in the system of dialogue at the semantic stratum. Is it a point of entry? Or is it a system? If it is a system, then what is the point of entry to the semantic system of SPEECH FUNCTION? The account in Halliday (1985/1994) extends the version in Halliday (1984) in the areas of discretionary responses, the grammatical basis for the distinction between exchange of information and exchange of goods-&-services, and the incongruent realisation of responses through grammatical metaphor. However, the above questions remain unanswered. Matthiessen (1995: 434) interprets the issue as follows:

From a semantic point of view, the basic dialogue unit is the move; it is the contribution an interactant makes to the development of the dialogue. A move selects in the system of SPEECH FUNCTION for a type of interact, where the speaker adopts a speech functional role and assigns the addressee a complementary role. The choices in the MOOD systems realize speech functional categories like statement, question, and command.

Matthiessen illustrates the realisation process across the two strata in Figure 1.14. This figure is consistent with the one in Matthiessen & Halliday (1997: 39).

Figure 1.14: Interpersonal dialogue resources and their realisation across strata (Matthiessen 1995: 435)



We can propose that SPEECH FUNCTION denotes a semantic system; a move is the point of entry to this system; and a clause grammatically realises a move.

After clarifying the notions of speech function and move, we will now discuss the notion of turn. TURN is a subsystem in the system network of SPEECH FUNCTION in Halliday (1984). This means that the notion of turn in the systemic functional approach is different from the one in the CA approach, in which a turn is defined as a shift in the direction of speaking 'flow'. In short, TURN denotes a subsystem in SFG, whereas in CA a turn is an interactional unit. The technical term 'turn' is clearly used in two different though related senses.

1.6.3.2 Rank at the semantic stratum

Halliday (1984) mentions the notion of congruence and lists eight congruent realisations for the social-contextual options, as shown in Table 1.11, and points out the possibility of non-congruent forms in real life. However, he does not elaborate the concept any further. In Halliday (1985/1994), he specifies the non-congruent forms as in Table 1.13.

Table 1.13: Speech functions and responses (Halliday 1985/1994: 69)

		initiation	expected response	discretionary alternative
give	goods-&-services	offer	acceptance	rejection
demand	goods-&-services	command	undertaking	refusal
give	information	statement	acknowledgement	contradiction
demand	information	question	answer	disclaimer

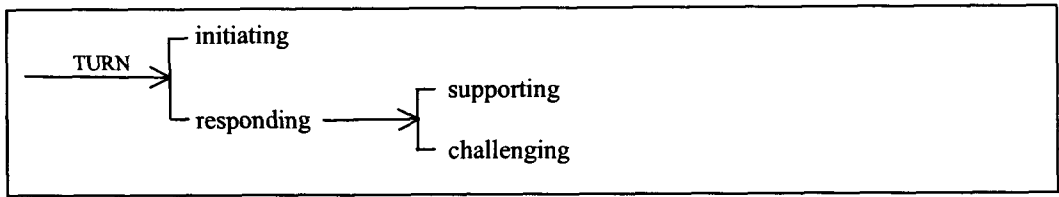
This notion of initiating + responding turn is slightly reminiscent of the notion of ‘adjacency pairs’ in the tradition of ethnomethodological conversation analysis as shown in Table 1.14.

Table 1.14: Co-relations of content and format in adjacency pair seconds (Levinson 1983: 336)

FIRST PARTS:	request	offer/invite	assessment	question	blame
SECOND PARTS:					
preferred:	acceptance	acceptance	agreement	expected answer	denial
dispreferred:	refusal	refusal	disagreement	unexpected answer or non-answer	admission

In the CA tradition an adjacency pair is regarded as the most basic unit for the overall structure of conversation. In the SFG approach the notion of initiating + responding turn serves at least two purposes, depending on the focus of research. First, it serves as a means of expanding the system of SPEECH FUNCTION to greater delicacy. The recognition of expected and discretionary alternatives can easily expand TURN in the system network of SPEECH FUNCTION as in Figure 1.15.

Figure 1.15: An expanded system of TURN



Second, it also serves in the description of the overall (generic) structure of conversation. Here a question arises: does the ‘pair’ constitute a larger unit in the overall structure? This question and its answer are strongly related to the issue of rank at the semantics stratum.

The point that semantics is discourse semantics (or text semantics) goes back to Halliday and Hasan (1976) and earlier, contrasting with the traditional focus on propositional semantics (ideational semantics of the clause). Martin (1992) suggests that moving from the lexicogrammatical stratum to the semantic, or discourse semantic, stratum means a move towards a unit larger than the clause. For instance, his hyper-Theme and macro-Theme relate to the paragraph and beyond in the textual metafunction. In the interpersonal metafunction he proposes two ranks in the discourse semantics, viz. move and exchange. Corresponding to these two ranks, there are two system networks, namely SPEECH FUNCTION and NEGOTIATION respectively as in Figure 1.16.

Figure 1.16: Resources for dialogue (by strata and rank) (Martin 1992: 50)

rank	system		rank
exchange	NEGOTIATION		
move	SPEECH FUNCTION	MOOD	clause
	discourse semantics	lexicogrammar	

In Eggins (1990), there is only one rank, i.e. move, at the discourse semantic stratum because, as she says, her focus is the continuity of casual conversation. She suggests that the sequence of moves in casual conversation is better described as a dependency structure, rather than as a constituency one. And she claims that:

... describing conversational structure through reticula which capture the simultaneous interpersonal and logical dimensions of dependency relations between moves provides a more motivated and interpretable representation of the continuity and open-endedness of conversational interaction. (Egins 1990: 130)

A summary of some previous work on the issue of rank at the semantic stratum in the approaches to discourse analysis discussed here is presented in Table 1.15.

Table 1.15: Rank at the semantic stratum

Sinclair & Coulthard (1975)	Burton (1978)	Butler (1985)	Egins (1990)	Martin (1992)
Lesson Transaction Exchange Move Act	Exchange Move Act	Exchange Move Act	Move	Exchange Move

One of the differences between Egins (1990) and Martin (1992) on the one hand and the other scholars listed here on the other hand concerns the rank of act. This is related to the issue as to how to handle monologue in conversation, an issue that will be addressed in Chapter 3. The various ways in which previous studies have tackled the issue of an extended monologic passage in conversation are outlined in Table 1.16.

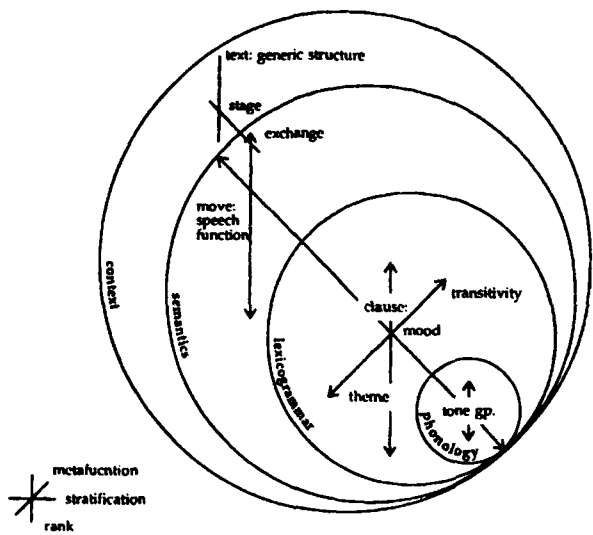
Table 1.16: Ways to handle monologue in conversation

Sinclair & Coulthard (1975); Burton (1978); Butler (1985)	Ventola (1987, 1988)	Egins (1990)	Martin (1992)
Act	Move complex	Move: [continue]	Cohesive system

The issue of rank and the handling of a monologic turn in conversation are related. They are in turn affected by the nature of the conversation being analysed. Matthiessen (1995) points out that while it seems easier to identify an exchange unit with a multivariate structure in task-oriented dialogue, less task-oriented dialogue may be more univariate in character with an ongoing expansion of moves into sequences. The systemic functional

approach, including the generic structural approach towards the overall structure of the text, and the general system of SPEECH FUNCTION are depicted diagrammatically in Figure 1.17.

Figure 1.17: Moves and exchanges in the overall system (Matthiessen 1995: 446)



After sketching a historical map of the study of language in China in Section 1.2 and a theoretical map of the systemic functional grammatics in Sections 1.3-6, I am going to sketch an epistemological map of data collection and analysis in the following section.

1.7 Methodology and Data

Halliday, McIntosh and Strevens (1964) pointed out that:

...however, we talk about ‘the linguistic sciences’ it is not so much because they are like this or that other science in particular, but because they share something which is common to all sciences: their methods fall within what could be called general scientific method.

This section will begin with a brief discussion of two logical systems, ‘scientific’ method and methodology in the field of linguistics, before explicating the methodology and data analysis used in the present study. Note that the label ‘scientific’ as a status symbol is not of much concern here, but instead this brief discussion is meant to explicate the logical extent of any generalisations resulting from the observed data, as well as the contribution of the present study to the “degree of belief” in the theory of systemic functional grammar.

1.7.1 Logic and scientific method

There are two distinct logical systems inherent in any scientific and social science research, i.e. deductive logic and inductive logic (if Charles Peirce’s “abduction” is treated as a special case of induction). Beveridge (1950: 113) describes these as follows:

In induction, one starts from observed data and develops a generalization which explains the relationships between the objects observed. On the other hand, in deductive reasoning one starts from some general law and applies it to a particular instance.

Advocates of induction, like Frances Bacon, suggest that scientific knowledge is mainly gained and confirmed by induction. However, the foundation of induction – that the future will resemble the past – was under challenge at the time it was introduced. As Hume pointed out in *Enquiry concerning Human Understanding*:

if there be any suspicion that the course of nature may change, and that the past may be no rule for the future, all experience becomes useless, and can give rise to no inference or conclusion. It is impossible, therefore, that any arguments from experience can prove the resemblance of the past to the future; since all these arguments are founded on the supposition of that resemblance. (Honderich 1995: 405)

To confront the challenge, advocates of induction turn to the following solutions: (1) proposing what is known as ‘pragmatic justification’; (2) formulating an inductive logic which would specify conditions under which such projections are justified; (3) introducing the notion of ‘probabilistic reasoning’; and (4) limiting the conclusion on the grounds that it explains the available evidence, the so-called ‘inference to the best explanation’.

In deductive theories on the other hand an inference is justified if it conforms to a principle of logic or to an argument validated by the principle of logic. However, we know that though inference is a psychological process, the principles that make it deductively valid are independent of any psychological fact. So the deductive theorists have to answer a serious question: what justifies the law of logic?

Although the question of scientific method is generally thought to resolve itself into two components, i.e. the problems of discovery and justification, it seems fair to say that the latter part has received more attention in the past. Traditionally, the most common model of scientific method is something as follows: researchers begin with an interest in something. They then develop a theoretical understanding of it, which results in hypotheses or expectations. These general concepts are translated into specific indicators and procedures. Then testable hypotheses are formed. Experiments are set up or observations are taken aiming to prove the hypotheses. And finally, the hypotheses are either accepted or rejected and the theory is proved or disproved.

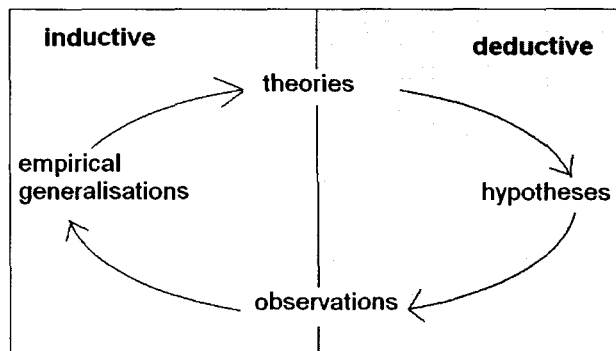
There are two common misunderstandings in this model. First, scientific theory can be proved. In fact, scientific theory can logically be disproved but very rarely, if not never,

be completely proved in practice. A short review on the history of science can 'prove' that. Second, theory is the end product of the whole process. However, according to Babbie (1979: 23)

theories are seldom confirmed at a specific time because there are few critical experiments in science – experiments upon which a whole theory stands or falls. Instead, evidence is built up over time to lend support to a continually modified theory.

In actual practice, the process of theories, hypotheses, experiments/observations and empirical generalizations forms a circle, a process captured by. Walter Wallace (1971) in his 'wheel of science'.

Figure 1.18: Wheel of science



In this model, theories generate hypotheses; hypotheses suggest observations; observations produce generalisations; and these generalisations result in the modification of the original theories. The modified theories then suggest somewhat modified hypotheses and so on. So there is neither beginning nor ending of the process. Here scientific inquiry in practice typically involves an alternative between deduction and induction. In the deduction phase we reason toward observations, whereas in the inductive phase we reason from observations. As a consequence both logic systems are essential in the process of scientific research.

1.7.2 Methodology in the field of linguistics

The nature of knowledge and the events being observed in linguistics are certainly different from those of physical science. However, linguists have in the past fallen into a similar dispute as in physical scientists about how to study language. The dispute derived in part from conflicting views about the nature of scientific knowledge and methods, and in part from different views about the ultimate goals of linguistics. Roughly speaking we can put the different opinions on a cline. At one end lies Bloomfield, who can be crudely characterised as an empiricist. At the other end lies Katz, a rationalist. For Bloomfield, the objective of linguistic research is to achieve a description of an individual language or sets of language data (corpus). For Katz, the objective is to characterise human language as some sort of universal human capacity. So they assign different importance to the processes of observation, prediction and verification; have different attitudes to the analysis of data; and accept different meanings for the word 'fact'. In general their methods can be characterised as inductive and deductive respectively (for details, see Bloomfield 1939; Hjelmslev 1943; Roos 1957; Halliday, McIntosh & Stevens 1964; Lyons 1965). Halliday, McIntosh and Stevens (1964: 13), on the other hand, approach the issue somewhere in between. They suggest that:

... behind any statements made about languages in linguistics and phonetics lies a chain of abstraction. First, certain events, linguistic events, are observed. They are found to display partial likeness. So, second, generalizations are made about them. Third, on the basis of these generalizations hypotheses are formulated to account for the events. These are tested by further observations, and out of them, fourth, is constructed a theory of how language works. From this theory are derived methods for making statements about linguistic events. These statements link the theory to the events it is set up to account for, and they can now be evaluated by reference both to the theory and to the events: the best statements are those which make maximum use of the theory to account most fully for the facts. The chain is thus 'observation – generalization – hypothesis – theory – descriptive statement.' This is not of course a process carried out by each linguist, or even carried out in successive steps at all.

Though not explicitly mentioned, it is reasonable to presume that as the “hypotheses” are tested by “further observations”, it might lead to the hypotheses being accepted or rejected and then to the theory being accepted, modified, or rejected. Due to the nature of the knowledge in this field, the theory can never be ‘proved’. But our belief in the theory is a matter of degree. And our belief in systemic functional grammar as a grammatics can be enhanced in at least three ways, namely through further observations of the same event, i.e. by increasing the size of the data; through further observations of different events, i.e. investigating different registers/text types; and through application of the theory to describe of further languages, i.e. by examining different languages. These actions might lead to further modification of the theory and modification in this way will further enhance, instead of demolish, our belief in the theory. Accepting the possibility of modification of the theory in the light of further observations, it is not difficult to see the resemblance of Halliday, McIntosh and Streven’s (1964) model to Wallace’s (1971) wheel of science. And this is the standpoint on which the present study rests.

1.7.3 Methodology of the present study

At which point does the present study come into the circle? It is not the intention of the present study to observe the linguistic data, to make generalisation and form hypotheses, and to produce a new theory. Instead, the present research will apply the theory of SFG to the description of Chinese texts. In Matthiessen and Nesbitt’s (1996) terms, the current study is working on the ‘Token’, which, in this case, is Chinese.

Concerning the methodology of the present study, I have to make four decisions. First, applying the notion of instantiation, the study can start from a system as a potential and test it with the corpus as instances, i.e. a deductive approach, or begin with the analysis of instances in the corpus and end up with the description of a system, i.e. an inductive approach. My choice is an inductive approach because, unlike English, which has been explored quite thoroughly from the systemic functional perspective in many studies, there are far fewer studies which have taken up Chinese as their ‘Token’ and the text types which they have analysed are different from those investigated in the present study. As a

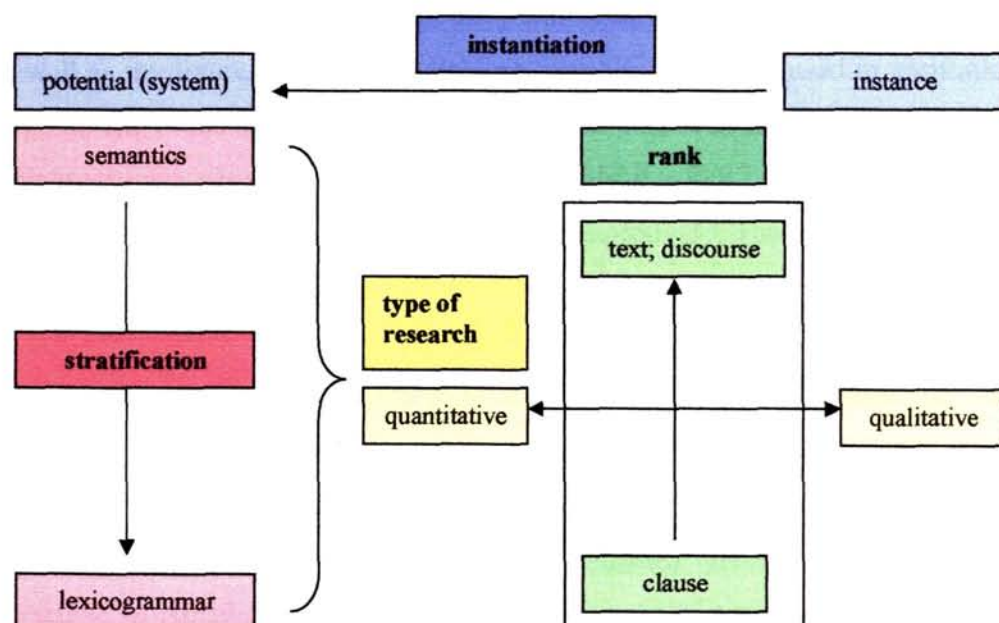
result, I have decided not to take any of the previous descriptions of Chinese system as my point of departure.

The second decision concerns the notion of stratification. As the present study focuses on both the semantic and lexicogrammatical strata, there are two possible approaches, namely top-down or bottom-up. This means that we can start exploring the systems at the semantic stratum and end with systems at the grammatical stratum, i.e. follow a top-down approach. To put it in another way, we can first explore the meaning and then investigate how the meaning is realised (recoded) in wordings. Or we can adopt a bottom-up approach, i.e. start from the systems of wording and examine what meanings they realise. Here my choice is a top-down approach because in the present study I will focus mainly on the clause rank and I intend to take a preliminary step in extending the clause grammar to discourse semantics.

Third, the present study adopts a text-based discourse analytical approach instead of relying on invented language examples. This option is a rational consequence of my adoption of an inductive approach. It is also a direct response to one of the aims of the research, i.e. to take a preliminary step from clause grammar to discourse semantics. In addition, by adopting this approach, I have to deal with all sorts of data, whether or not they fit the theory squarely.

Lastly, the present research will be both qualitative and quantitative, hoping to gain both the advantages of qualitative research in providing further insight and of quantitative research in formulating generalisations. Of course, a study of this kind has to be quite limited in scope, something that will be further discussed in the following section. The four decisions are depicted in Figure 1.19.

Figure 1.19: Research approaches of the present study



The four arrows indicate the four approaches. (1) Concerning the notion of instantiation, the study starts working on the instances and ends up with descriptions of systems. (2) Concerning the notion of stratification, it starts exploring semantic systems and ends up with their realisation in grammatical systems. (3) Concerning the notion of rank, it starts investigating clause grammar (Chapters 2-4) and extends towards text semantics (Chapters 5-6). The latter involves some larger units of analysis, namely paragraph, chapter and part of a book. (4) Concerning the types of research, it is both qualitative and quantitative.

1.7.4 Data in the present study

The present study is mainly intended to achieve a description of Chinese grammar from a systemic functional perspective. However, comparison will be made with English, in the hope of shedding some light on the task of translating between the two languages and on teaching Chinese to English speakers. The texts in focus are Chinese texts produced by a professional translator, and their ‘naturalness’ is judged by myself, as a native speaker of Chinese. The English corpus consists of an English-language novel written by Agatha Christie, *Murder on the Orient Express*, while the Chinese corpus consists of the Chinese

translation of this novel. The choice of text is made to support the comparison between the systems in the two languages in the penultimate section of each chapter in the thesis as well as my future research on comparison on the languages used in translation and in original text. Since it is a long novel – the English corpus consists of 9907 clauses and the Chinese corpus consists of 10075 clauses – only the first chapter of the novel and its translation are shown in Appendices A and B respectively. The organisation of the whole novel is shown in Appendix C.

Three texts have been extracted from both the novel and its translation, which will become the main text-base (or in technical terms, population of the data) for the qualitative analysis in Chapters 2 and 3, and part of Chapter 6. The three Chinese texts, presented in *pinyin* and accompanied by an interlinear gloss and a free translation, are presented in Appendix D. However, examples and illustrations will be taken from the whole novel if necessary.

In Chapters 4, 5 and 6, the whole corpus, i.e. all the clauses in the English original novel and the Chinese translation, will be analysed for the quantitative study. The data pertaining to each clause are entered into seven worksheets, at different levels of delicacy. The results are grouped first into chapters and then into parts according to the organisation of the novel. As a result, this study can analyse and compare result at different levels of delicacy as well as at different ranks, and for different chapters and parts.

Of the seven worksheets, Worksheet 1 is the most general, with every clause first analysed as either Theme or Rheme. Then Theme is further categorized as either textual, interpersonal or topical Themes and in turn as either marked or unmarked.

Worksheets 2 and 3 concern textual Theme. In Worksheet 2, every textual Theme is categorized as continuative, *wh*-relative or conjunctive, with the conjunctive textual Theme further subcategorized as elaborating, extending or enhancing. Worksheet 3 focuses mainly on the textual conjunctive Theme, with the elaborating type subclassified

as exposition, exemplification or clarification; the extending type as addition, variation or alteration; and the enhancing type as temporal-spatial, manner or causal-conditional.

Worksheet 4 concerns interpersonal Theme, in which every interpersonal Theme is further categorized as either vocative (vocative or expletive), modal adjunct (comment or modality), interrogative (finite or Wh) or polarity (positive or negative).

Worksheets 5 and 6 concern topical Theme. In Worksheet 5, each clause is first categorised according to its mood type, either as declarative, interrogative or imperative. Then each topical Theme is categorized as either marked or unmarked; substitute or non-substitute; predicate or non-predicate. In Worksheet 6, marked topical Theme is further categorized as either absolute Theme, Theme of process, Theme of complement or Theme of circumstance. Lastly, Worksheet 7 analyses the subcategories of Theme predication and Theme identification.

There are 136 pages of analysis for Chapter 1 in the novel. And there are 32 chapters in the whole book, not to mention the Chinese translation, which add up to approximately 8,000 to 9,000 pages of analysis, which are obviously impossible to present here. In Appendix E, only the first page of each worksheet of Chapter 1 of the English corpus is presented, just to illustrate how the analysis is carried out. The result of all worksheets of each chapter is entered into summary worksheets. Appendices F and G are the summary worksheet for the Chinese corpus and English corpus respectively. The results of these analyses constitute the basis for the quantitative analysis in the thesis.

1.8 Organisation of the thesis

The thesis is organised around four modules: theory, description, comparison and implications for translation. The theory is the 'Value', believed to be universal and tested for its applicability to different languages, while the description is the 'Token', unique for each language. The description will focus on the Chinese language because English has been widely explored. The comparison serves a particular purpose, providing

implications for translating between the two languages and for teaching Chinese to English speakers.

The first module, i.e. theory, is discussed mainly in Chapter 1. Further discussion of specific areas of the theory and a literature review will also be found in the introductory section of each chapter. Furthermore, Chapter 1 also serves to provide the context of the present study. The historical environment of the study of Chinese is discussed in Section 1.2; the ideational environment of the theory and the description of natural language in Section 1.3; the theoretical rationale in Section 1.4; the background of systemic functional grammar in Sections 1.5 and 1.6; the ideology of methodology and the methodology and data of the present study in Section 1.7; and the organisation of the thesis in Section 1.8.

The second module, i.e. description, forms the main body of the thesis. It is organised according to the three modes of meaning, i.e. the metafunctions. Chapter 2 explores the ideational metafunction, Chapter 3 the interpersonal metafunction and Chapters 4, 5 and 6 the textual metafunction. Generally speaking, each chapter follows a top-down approach, i.e. the semantic system network will be explored first, followed by the lexicogrammatical system network. Among the three metafunctions, the textual metafunction will be explored more thoroughly. In this way, Chapters 2 and 3 with their exploration of the ideational and interpersonal metafunctions, can be treated as providing the context for the investigation of the textual metafunction. In addition, the exploration of the VOICE system in Chapter 5 and the semantic systems of TEXTUAL CONTINUITY, TEXTUAL RELATIONS and TEXTUAL DEVELOPMENT in Chapter 6 can be taken as the first step in extending the clause grammar towards discourse semantics. It is only a 'first step' because there is a wide horizon waiting to be thoroughly explored despite the current realisation of the significance of discourse semantics to the understanding of language.

The third module, i.e. comparison, generally constitutes the penultimate section of each chapter while the fourth module, i.e. implications for translation and language teaching, as well as conclusions of the present study constitute the concluding chapter, Chapter 7.