To the memory of my grandparents

Li Mao-ch’ing and Kao Ts’ui-hsien

獻給我的祖父母李茂青先生和高翠仙女士
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<td>Reprinted</td>
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<td>Volume</td>
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<td>Verb Phrase</td>
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<td>Any word or character</td>
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<td>Unacceptable; disallow</td>
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<td>Or (in glosses); and (in diachrony)</td>
<td>Or (in glosses); and (in diachrony)</td>
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<td>A place where text has been skipped</td>
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<td>Possible; possibility</td>
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<td>be different from; not the same as</td>
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NEED  constrain / compel / force > participant-external necessity (82)
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会 huì (139)
能 něng (140)
能够 něnggòu (142)
得 dě or de (143)
可以 kě(yǐ) (143)

Probability by
該 gāi (145)
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Ability by
能 něng (151)
能够 něnggòu (153)
会 huì (154)
可 kě (156)
可以 kě(yǐ) (157)
得 dě or de (158)

Need by
要 yào (160)
需要 xūyào (161)
得 déi (162)

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Permission / possibility by
能 něng (163)
能够 něnggòu (164)
可以 kě(yǐ) (166)
得 dě or de (167)

Obligation / necessity by
要 yào (169)
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   會 huì unite / meet > know / understand > mental ability > participant-internal ability (205)
   可 kě agree / approve > permit > participant-external non-deontic / deontic possibility (208)
   得 dé / de get / obtain > participant-external non-deontic possibility (209)

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   要 yào waist > tie / center > contract > desire > participant-external non-deontic necessity (214)
   該 gāi disciplines / requirements > possess all > include everything > sufficient > participant-external non-deontic necessity (217)
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1. Introduction

Modality, a grammatical or semantic-grammatical category, is an important component of human languages. This is at least the case in most European languages (Goossens 1985a: 217). To what extent it is a near-universal remains to be investigated. The present thesis is to contribute to the investigation, through an examination of two genetically and geographically unrelated languages, English and Chinese.

1.1 Aim

As the title suggests, this thesis is to present a typological study of modality in English and Chinese. It goes with two assumptions, first, that there is a typological category, called modality, in English and in Chinese and, secondly, that modality is expressed in these two languages by very different formal systems with much in common in terms of the meanings that they express. The thesis intends to find out what these two languages have in common, how they differ in their systems of modality, and to what extent the universal features of modality are manifested in English and Chinese.

In this thesis, we will describe modality in the languages concerned. At this language-specific level, we hope to advance the understanding of Chinese modality as this is the first time that it is studied from the typological point of view. With respect to English, the essential work has already been done, and we can do little more than to extract and reformulate the relevant hypotheses, so as to make it appropriate for comparison with Chinese. It is also hoped that this detailed comparison will be found useful in the setting of teaching English to students of Chinese and teaching Chinese to students of other languages.

1.2 Scope

This study of modality is directed at contemporary English and modern Chinese. Although Old English and Ancient Chinese are involved in the treatment of issues like diachronic development, contemporary English and modern Chinese are the focus of study.

Any language, particularly an extensively used one, cannot avoid to have dialectical varieties. English has British, American, Canadian, and Australian, etc. Within British, there are Scots, Irish, Northern and Southern English varieties. Chinese has Wu, Xiang, Gan, Min, Cantonese, Hakka, and Mandarin (with their numerous sub-dialects). Speakers of different Chinese dialects often find each other unintelligible, but dialects are unified by a common script. In the study of English modality, this thesis is restricted to Southern Standard British English and American English, which show some but not much variation in the application of modals. In the study of Chinese modality, this thesis is restricted to Mandarin.

Mandarin is a linguistic term denoting the major dialect family of China (Li & Thompson 1981: 1). It is spoken by 70 per cent of the Chinese population across the northern, central and western regions of the country. Its standard pronunciation and grammar are associated with the speech of Beijing and the surrounding countryside (Yip & Rimmington 1997: 1), which for
centuries has been recognized as the standard language of China because of the political and cultural significance of that city. Mandarin was adopted by the Chinese Nationalist Government as 国语 guóyǔ ‘national language’ at the beginning of 1920s (Hu 1921 [rpt 1998: 331]), which is still in use in Taiwan, and was renamed by the Chinese communist Government as 普通话 pǔtōnghuà ‘ordinary language’ in Chinese mainland after 1949 (CH 1980: 767). Our term ‘Mandarin’ is meant to include both guóyǔ and pǔtōnghuà.1

In the treatment of modality in English and Chinese, this thesis will focus on the semantic domains that involve possibility and necessity and the relevant meanings based on these two paradigmatic variants, i.e. ability (capacity), need, permission, obligation, uncertainty and probability. Although it involves the premodal senses and postmodal uses in the discussion of diachronic development, the meanings centering around possibility and necessity are the main target of study. The motivation for handling a relatively restricted notion of modality will be discussed in 2.2.4.

Modal meanings can be expressed in several ways, such as main verbs, adverbs, intonation, inflection, auxiliary verbs, particles, adjectives, and nouns as illustrated in Table 1-1. The focus of the thesis is on modal auxiliary verbs, i.e. the grammaticalized expressions that have or had a verbal status or that function in paradigms in which the majority of the markers have had this status, indicating the semantic domains which involve possibility and necessity as paradigmatic variants (van der Auwera & Plungian 1998: 80, van der Auwera 2001: 23).

<table>
<thead>
<tr>
<th>Means</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main verb</td>
<td>English verbs such as ‘expect’, ‘believe’, etc., implicitly express modal meanings of probability of occurrence assessment. e.g. <em>I don’t expect John will sing the songs. I don’t believe he’s coming.</em> (Perkins 1983: 98)</td>
</tr>
<tr>
<td>Adverb</td>
<td>Perhaps I’m wrong. (LDAL 1985: 180) Possibly, it will rain. (Lyons 1977: 451)</td>
</tr>
<tr>
<td>Intonation</td>
<td>In English, a sentence uttered with a rising intonation at the end may convey the sense of unbelievablelity. In the right context it may mean that the speaker is not certain of a state or event. e.g. <em>John is coming.</em> (Palmer 1987: 29)</td>
</tr>
<tr>
<td>Inflection</td>
<td>Such as the markers of mood in many languages</td>
</tr>
<tr>
<td>Auxiliary verb</td>
<td>e.g. <em>No vehicle may be left in the University grounds during vacations.</em> (Coates 1983: 132) <em>He may have gone to Paris.</em> (Lyons 1977: 796)</td>
</tr>
<tr>
<td>Particle</td>
<td>In Chinese, uncertainty or advice may be suggested by particle, a monosyllabic item with no independent meaning of its own but serving to deliver a structural or functional message when placed at the end of sentence. e.g. 你喝水吧。<em>Nǐ hē shuǐ ba.</em> ‘Why don’t you drink some water?’ (Li &amp; Thompson 1981: 308) 他好象是這麼說的吧。<em>Tā háoxiàng shì zhēme shuō de ba.</em> ‘That’s what he said, it seems.’ (CED 1978: 12)</td>
</tr>
<tr>
<td>Adjective</td>
<td><em>It’s possible that he went to Paris.</em> (Lyons 1977: 796) <em>They are sure to come. He’s certain to fall at the first fence.</em> (Perkins 1983: 76)</td>
</tr>
<tr>
<td>Nouns</td>
<td>This is observed in both English and Chinese. e.g. 沒有必要再討論了。<em>Méi yǒu biyào zài tāolùn le.</em> ‘There is no need to discuss it any more.’ (CED 1978: 33)</td>
</tr>
</tbody>
</table>

---

1 Li & Thompson’s (1981: 1) statement that China did not officially establish a common language for the nation until 1955 is untrue.
Xu (1991: 62-3) argues that a comparative study between English and Chinese should be made not only from static point of view, i.e. the level of language structure, but also from the dynamic one with due attention for pragmatics. This is a good idea, but it is not enough. The study of modality in this thesis will be made in terms of grammatical features, semantic functions and pragmatic variations, logical representation, and diachronic development.

The thesis is to look at modal verbs in both written and spoken language and to take account of stylistic variation, but written language is the main focus, especially in the study of the diachronic development of modality.

1.3 Method

Given the assumption of the universality of meaning, languages are comparable. However, this is not to say that any category of one language can be compared with any category of another. The first thing is to determine the comparable category. The determination of the comparable category is related to the theoretical model used in the cross-linguistic study, that is typology. In the present study of modality in English and Chinese, we have chosen the theoretical framework proposed by van der Auwera & Plungian (1998) and van der Auwera (2001) for the typological study of modality. This framework is based on the studies by Lyons (1977), Palmer (1986, 1990), and Bybee et al (1994). The method involves three steps as Croft (1990: 12) summarizes: first, determination of a typological category, viz. modality; secondly, identification of the formal grammatical category in English and Chinese respectively; thirdly, generalization about the category across the languages.

According to Croft (1990: 6), language-specific analysis of a phenomenon in detail is the essential basis of all linguistic research. Therefore, a comprehensive analysis of English and Chinese modality will first be carried out in chapters 3 and 4 respectively. The same structure is to be used in the discussion of modality in both languages, so as to allow the cross-linguistic comparisons of chapter 5. Under this structure, modality is examined at four levels. The first is a detailed description of the morphosyntactic properties of the modal verbs in each language. The second is a comprehensive analysis of their notional functions, including both the semantic functions and pragmatic uses. The third is a careful examination of how modality interacts with negation and how we can use some notions of modal logic to represent this. And the fourth is to construct a diachronic path for each modal.

At the level of notional functions, the analysis goes from modality types to semantic functions and pragmatic variations; then to the lexical forms, and to co-occurrence with syntactic features. These features include negation (modality / proposition), voice (active / passive), main verb (active / stative), subject (first / second / third person; animate / inanimate), phase (perfect), aspect (progressive), tense (past / present / future), and style (formal / informal; written / spoken).

The modals are polysemous. So their analyses have the problem of deciding whether to structure discussion according to meaning or according to form. As pointed out by Coates (1983: 27-9), the former method has the disadvantage of dispersing an analysis of a single
modal over many chapters, while the latter ignores the fact that there may be more in common between two meanings of two different modals than between two meanings of the same modal. What I have attempted here is the grouping of the modals into chapters according to the semantic notions, as meaning forms a starting point for any a typological study across languages.

In the study of the diachronic development of Chinese modality, we may come across the situation in which a modal verb is observed with all the types of modal meaning in the earliest texts available so that it is impossible to propose a diachronic path for them. To cope with this situation, a quantitative method will be adopted since, we believe, the frequency of attestations may be related to the centrality of meaning. English translations of Chinese propositions in modal forms will be given particular attention in bilingual comparisons and contrasts. The English and Chinese data will be entered on a semantic map and the development paths will be sketched using that map, which thus has both diachronic and synchronic relevance.

The cross-linguistic analysis of modality in English and Chinese is to be made in Chapter 5. It is of a dual-track nature as illustrated in Fig. 1-1. In this process, there is no distinction between source language and target language. The comparison and contrast is based on a typological category of human languages and made in a parallel or side-by-side fashion. Such an analysis may be grammatical, semantic, pragmatic, or a combination of all of them. Whatever is the case, it will be a fairly complex and subtle analysis.

![Fig. 1-1 Dual-track comparison and contrast](image)

1.4 Data

Like many other studies in this area, this thesis makes use of the well-sampled data collection, and hypotheses, in the relevant grammar books and research papers. The purpose of this practice is to assure the same degree of representativeness they aspire to. For English modality, they include Lyons (1977), Coates (1983), Perkins (1983), Quirk et al (1985), Palmer (1986 [2001], 1990), Bybee et al (1994), and van der Auwera (1998 with Plungian, 2001), etc. For Chinese modality, they include Ma (1898 [rpt 1983]), Li (1924 [rpt 1992]), Lü (1942 [rpt 1982]), Wang (1943 [rpt 1985], 1944 [rpt 1984]), Gao (1948 [rpt 1986]), Chao (1968), Tsang (1981), and Sun (1996), etc. In addition to these Chinese linguists, we will refer to the linguists of Chinese in the Western countries as well. They include Li & Thompson (1979, 1981), Alleton (1984, 1994, 1998), and Ziegeler (2002), etc.

When the data in the available literature do not meet the need of the study, we resort to the application of computer-based corpora. For English, we use the Lancaster-Oslo/Bergen (LOB) corpus (Johansson et al 1978); for Chinese, we use the Antwerp corpus of Chinese (ACC), a special corpus we built up for the current research (details to be seen in Appendix 3).
The aim is to avoid relying on subjectively invented examples and arriving at an unrealistically ‘tidy’ view of modality. The ACC corpus has been used mainly for testing and exemplifying purposes in the study of Chinese modality, particularly for the identification of grammatical features, description of semantic/pragmatic functions, and the discussion of the diachronic evolution.

The study of spoken language is not the primary purpose of the thesis, but some attention has been given to it. Spoken English examples are available in the above mentioned sources. The spoken Chinese materials are provided by interviewing native speakers, many of them students at the University of Antwerp. They were asked to provide the most natural Chinese equivalents of English sentences and no attempt was made to check the material against published grammars.

1.5 Terms

Like in Palmer (1990: 1-2), the terms ‘meaning’, ‘semantic’, and ‘semantics’ are used throughout this thesis in a general sense, to include what might also be included under ‘notions’, ‘uses’, ‘senses’, and ‘functions’, except where a specific distinction is drawn.

It is useful to distinguish various ‘types of modality’. A modality type is a set of modal meanings attributed to an identical semantic basis. In the studies of modality, linguists have identified epistemic modality, deontic modality (Lyons 1977), dynamic modality (Palmer 1986 [2001], 1990), and agent-oriented modality (Bybee et al 1994), etc. The last two types of modality have been reformed and renamed by van der Auwera & Plungian (1998) as participant-internal modality and participant-external modality (which also incorporates part of Lyons’ (1977) deontic modality). These labels will be given a detailed discussion in 2.2.

‘Semantic notions’ refer to the meanings expressed in each of these types. For example, under deontic modality, there are obligation and permission. Under participant-internal modality, there are ability and need. Permission, obligation, ability, need, and the like, proposed by various linguists, are semantic notions.

1.6 Typography

To make a distinction between ‘lexical items’ or ‘lexemes’ and ‘forms’ or ‘word forms’, we follow, with Palmer (1990), the convention of using small capitals for the ‘lexeme’ (e.g. CAN, MAY), and italics for the inflectional forms (e.g. could, might, etc). Small capitals are used in the general discussion, and italics when reference is made to particular examples.

However, absolute consistency is difficult. Should is formally the past tense form of SHALL. But it functions as that past tense form only in reported speech. Much more commonly, it is used, exactly like OUGHT TO, to express a kind of obligation, and has nothing directly in common with SHALL. For that reason, when it patterns with OUGHT TO, it is best treated as the separate modal SHOULD.

Such a typographical arrangement is designed only for the descriptive analysis of English modality. Chinese is not an inflectional language. A Chinese modal verb maintains its form
irrespective of tense, number, or person. Therefore, there is no need to use the above typography in the description of Chinese modality.

The only Chinese modal which needs a special treatment is 得. At the pre-verbal position, 得 can indicate both possibility and necessity. In this case it is phonologically two words: dé ‘can’ and děi ‘must’. It may also occur at the post-verbal position indicating possibility, phonologically realized as de ‘can’. Therefore, 得 is orthographically one word, semantically two words, and phonologically three words. To distinguish the three forms of 得, we resort to dé, de, and děi in the Chinese spelling system Pinyin.

Chinese characters are retained. Chinese Pinyin for a specific expression is given in italics. The English translation of the expression is given between quotes, e.g. 能 néng ‘can’. However, the quoted meaning is just the basic one for the expression. It cannot be taken as the only one since the form it refers to may be polysemous in meaning.

When an important term is introduced for the first time or for the purpose of definition, the term is given in bold type, e.g. epistemic modality. Such a term often occurs in the text and plays an important role in the description, analyses, comparison, and contrast of modality in English and Chinese.
2. Typology and Modality

As the title of the thesis suggests, the present study is a typological study of modality in English and Chinese. To carry out such a study, we need to make clear some theoretical issues on typology and modality, e.g. what is meant by typology and modality respectively, the relevance of typology to the study of modality in English and Chinese, and how language-specific definitions of modality by English and Chinese linguists do or do not harmonize with the typological ones.

This chapter consists of four sections. The first deals with typology, introducing the theoretical approach to be adopted in the current study. The second discusses modality, assuming a typological category of modality applicable to both English and Chinese. The third tackles some theoretically valid dichotomies related to the study of modality. And the fourth describes some logical principles underlying the notions of possibility and necessity. This chapter should provide a theoretical framework that will apply to the chapters of individual language description and cross-linguistic analysis.

2.1 Typology

Let us come to typology first. This section is not to discuss in detail the arguments for the theoretical status of typological studies, but to examine some of the methodological and empirical issues for a typological study of modality in English and Chinese. Firstly, what is meant by the term ‘typology’? Secondly, what is the prerequisite for typological studies? Thirdly, what is the general strategy for a typological study?

2.1.1 Definitions of typology

‘Typology’ is a term firstly found in use in natural, particularly social, sciences, e.g. biology, archaeology, and psychology. In these sciences it refers to the system of groupings, usually called ‘types’. The members of the groupings are identified by postulating specified attributes that are mutually exclusive and collectively exhaustive. The aim of the groupings is to aid demonstration or inquiry by establishing a limited relationship among phenomena (Britannica 12: 89). This is the definition of typology outside linguistics. It can be paraphrased as ‘taxonomy’ or, as (Croft 1990: 1) briefly puts it, “a classification of the phenomenon under study into types, particularly structural ones”.

The term ‘typology’ made its first appearance in linguistics in 1901 (Plank 1991: 424, 422) and seems to be borrowed from psychology (Greenberg 1974: 13). Since then, the term ‘typology’ has been defined in a number of different ways by different linguists at different historical periods. Croft (1990: 1-2) supplies a good summary of its main definitions. First, typology refers to “the classification of structural types across languages” (p.1). The most common version of this classification was that into three main groups ‘isolating’, ‘agglutinative’, and ‘fusional’ proposed by the German linguist Wilhelm von Humboldt (1768-1835) in the early nineteenth century. A fourth category, ‘polysynthetic’, has sometimes been suggested (Crystal 1997: 400). According to Croft (1990: 1), “this is the broadest and
most unassuming linguistic definition of typology”. With this definition, a linguistic typologist studies which single type a language belongs to. He aims to define the types and enumerate or classify the languages into those types. His work can be exemplified with the morphological classification of the early twentieth centuries. We will follow Croft (1990: 1) to refer to this definition of typology as **typological classification**.

After the advent of structuralism in 1930s, there appeared the second definition of typology, which concerns the study of linguistic patterns found cross-linguistically (Greenberg 1974: 43). As Croft (1990: 1) describes it, this definition is more specific and focuses particularly on the patterns discovered solely by cross-linguistic comparison. Under this definition, cross-linguistic patterns form a particular domain of investigation for typology (Croft 1990: 2) and the general trend has been towards the generalizing approach, which links typology to the universals of human languages (Greenberg 1974: 49). A central component of typology is the implicational universal, which cannot be discovered or verified by observing only one language. Let us use the simple term **typology** to refer to this subdiscipline. It represents a well-established method of analysis in linguistics with cross-linguistic comparison as its fundamental characteristic (Croft 1990: 3, 4). It allows us to make progress on universal characteristics of a linguistic phenomenon and “in turn causes us to reassess the single-language analyses” (p. 6) in a new and different perspective.

The third definition of typology was established in the 1970s, as Croft (1990: 2) stated. In this definition, typology is still more specific, representing “an ‘approach’ to the study of language”, or “an approach to linguistic theorizing, or more precisely a methodology of linguistic analysis that gives rise to specific kinds of linguistic theories” (p.2). This approach “contrasts with prior approaches, such as American structuralism and generative grammar” (p.2) and is sometimes called the ‘Greenbergian’ approach to linguistic theory. It is closely allied to functionalism and, therefore, often called the **(functional-) typological approach**.

These three definitions, viz. typological classification, typology proper, and the functional-typological approach, are confusing for those who want to know what typology is, or is supposed to be, in linguistics. To make a clear presentation, we would like to declare that the term ‘typology’ in this thesis takes the definition in the second sense, i.e. typology proper — the study of linguistic patterns across languages. The cross-linguistic comparative approach that typology proper introduces will be called ‘typological’ hereafter in order to be distinguished from the comparative linguistics of the past two or three centuries.

**2.1.2 The prerequisite for typological studies**

People in the world speak so many languages that no one can tell exactly how many there are in current times. In Song (2001: 1), they are generally estimated to be about 4,000 to 6,000. Depending on where the distinction between languages and dialects is drawn, their total number may easily shoot up to 7,000. They show tremendous differences in pronunciation, writing system, and morphosyntactic features.

However, as human beings exhibit similar physiological mechanisms, similar needs,
similar relationships and, in general, share the same world (cf. Robins 1952), it is plausible to assume that they also exhibit some uniformity in the patterns of thinking. Language is a representation of thinking and bears a close relation with thinking. Therefore, human languages have universals in basic functions and rules, though with different linguistic conventions.

Sapir (1929 [1949: 160]) and Whorf (1940 [1956: 207-19]) presented a contrary view. They emphasized language differences, which imply different ‘worlds’. But we would like to side with those who acknowledge the universality, e.g. Palmer (1986: 3), since the fact that we can learn foreign languages, translate them into our own, and communicate with each other suggests that different languages have much in common. It is just the universals rooted in the same ground that make the learning, translating, and communicating possible. Therefore, theoretically speaking, human languages are comparable. This is a property inherited by human languages. We would like to term this property as comparability.

It should be noted that our definition of comparability is different from that in Croft (1990). In his definition, comparability refers to “the ability to identify the ‘same’ grammatical phenomenon across languages” (p.11). In our definition, it is an intrinsic attribute of human language in general. From our point of view, comparability can be attested by what he calls the ‘same’ grammatical phenomenon across languages, but is not restricted to the phenomenon itself. In this thesis, the ‘same’ grammatical phenomenon across languages is called a ‘typological phenomenon’. ‘Phenomenon’ is a general term here. It has two other alternatives ‘pattern’ and ‘category’. To undertake a cross-linguistic study, we first of all have to determine a phenomenon, identify a pattern, or construct a category applicable to the languages. This is due to the fact that the cross-linguistic comparison cannot significantly be made between any language-specific phenomena, patterns, or categories. The determination of a typological phenomenon, pattern, or category is the fundamental, descriptive prerequisite for cross-linguistic comparison. It is here that we differ, again, from Croft (1990), who refers to it as ‘comparability’ (p.11).

Then we come to the problem of how to determine a typological phenomenon. Theoretically, there are two general ways. One is to use the structural (or formal) criteria. The other is to use the notional (or functional) criteria. The latter involves both the semantic and the pragmatic features. Unfortunately, languages vary greatly in their structure, which makes it difficult to use structural, or only structural, criteria. Sometimes, they exhibit some similarity in structure, but it may not be adequate to use for identifying comparable grammatical categories across languages (Croft 1990: 11). So in reality, we have only one, or essentially one way, the notional. With this way, both semantic and pragmatic features, which are respectively inside and outside the structure of the language itself, play a role in determining the cross-linguistic identity of the morphosyntactic phenomena. It is these notional characteristics that should lead to what Thrane (1983: 155) calls ‘(cross-linguistic) equivalence classes’. This is the ultimate solution to this problem and can be exemplified by Greenberg (1966: 74), who basically employed semantic criteria in discussing this problem on word order in languages of differing structure, and Keenan & Comrie (1977: 63), who found an essentially
semantically based definition to identify relative clauses in an arbitrary language.

### 2.1.3 The typological research strategy

Palmer (1986: 2) proposed a two-step method for the typological study of a grammatical category. Croft (1990: 12) summarized the research strategy practiced by linguists such as Keenan, Comrie, Downing and Stassen. The proposal and the summary are listed in Table 2-1. As shown by the table, Palmer uses the word ‘identification’ in his two steps. He claims that the nature of this word in each step is quite different. In his step (i), the identification is based on the formal characteristics of each language and so category is, by definition, language-specific, but in step (ii), the identification rests upon shared semantic characteristics and so the category is cross-linguistic (p.2-3). Therefore, it can be assumed that Palmer’s (i) is roughly the same as Croft’s (ii), and Croft’s (i) is roughly the same as Palmer’s (ii). Croft’s first two points are actually an inverted version of Palmer’s proposal. Compared with Palmer’s proposal, Croft’s summary is more succinct since it has step (iii), which is concerned with cross-linguistic analysis. Croft’s (iii) may be implied in Palmer’s (ii), too, but it had better be separated.

<table>
<thead>
<tr>
<th>Step</th>
<th>Palmer’s (1986: 2) proposal</th>
<th>Croft’s (1990: 12) summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>“The identification of some grammatical categories in different languages.”</td>
<td>“Determine the particular semantic (-pragmatic) structure or situation type that one is interested in studying.”</td>
</tr>
<tr>
<td>(ii)</td>
<td>“The identification of these categories as being the same across languages.”</td>
<td>“Examine the morphosyntactic construction(s) used to express that situation type.”</td>
</tr>
<tr>
<td>(iii)</td>
<td></td>
<td>“Search for dependencies between the construction(s) used for that situation and other linguistic factors — other structural features, other external functions expressed by the construction in question, or both.”</td>
</tr>
</tbody>
</table>

We agree to accept Croft’s (1990) summary as “a standard research strategy” (p.12) for the typological study of a grammatical category. However, we would like to argue that a typological study may not follow the strategy strictly from step (i) to (iii). At the beginning of the study, the cross-linguistic valid definition of a category usually takes the form of heuristic one involving external function and is based on the pretheoretic intuitions concerning the ‘prototypical’ or ‘core’ examples of the category. The intuitive notion is often based on a particular language or a limited group of languages. As it goes with the language-specific identification, the second step, and cross-linguistic analysis, the third step, this definition may turn out to be incomplete or incorrect. It is often found necessary to revise or redefine the definition so as to make it more applicable to the languages in study. At this time, a typological study may go back to the typological definition in the first step. It may also go back to the typological definition from the second step, language-specific identification. It is a cyclical process with repeated refining and adapting until a cross-linguistic definition which can lead to the most fruitful typological generalization is achieved. The interplay between the pretheoretic
intuitive notion of the nature of the category and the actual cross-linguistic variation found in
that category is observed at all levels and in all the basic categories related to the central one.
Therefore, the three-step strategy summarized by Croft (1990: 12) should not be viewed as
something purely of a top-bottom fashion. A typological study can be performed in the
direction converse, or partially converse to the steps of the strategy. Palmer’s (1986: 2)
two-step proposal, which goes from language-specific to cross-linguistic identification of the
category, may reflect such a feature of the typological study to some extent.

Ideally, a typological study should cover all the languages in the world, but this is
practically impossible at present. The reason is that there are too many languages in the world
and lots of them have not been described yet. In addition, the number of languages in a
typologist’s command is quite limited. To mobilize and organize a large number of researchers
of all the languages in the world for a typological study is too difficult. The solution to this
problem is to use a linguistic sample, that is a substantial number of languages examined with
the properties in question. The sample can make a researcher confident that he is not dealing
with a coincidence.

This thesis presents a cross-linguistic study of the category ‘modality’ in just two
languages. This is a typological study based on the smallest linguistic sample. It is impossible
to argue that this kind of study can lead to any clear universals about a category of human
language in general, but it allows a close focus on the properties of the category in two
languages. As such it can be an important touchstone for the study of a typological
phenomenon on a widely distributed and well selected sample and a significant step towards
understanding the universals of human language in general.

The two languages in our study are English and Chinese, which are genetically and
geographically unrelated. The strategy followed in the study is that summarized by Croft
(1990: 12). In a way oriented to our study, the strategy can be restated as:

(i) determine a typological category, viz. Modality, which is defined (mainly) with
semantic functions;
(ii) identify, describe, and analyze the category in each language, first English and then
Chinese; and
(iii) compare, analyze, and generalize about the category cross these two languages.

The findings of our study will be discussed against the background of the cross-linguistic
studies of modality in general, which have been made so far on a wide variety of languages. It
is due to the strategy used in this study that we adopt the term ‘typological’ in the title of the
thesis.