Thesis submitted for the Degree of

Doctor of Philosophy

at the University of Leicester

by

Wei-Wei Shen BA MA

School of Education

University of Leicester

May 2001

ABSTRACT

The Vocabulary Learning Strategies of Chinese and British University Students, with an Analysis of Approaches to Selected Cultural Keywords

Wei Wei Shen

In learning foreign language vocabulary there is evidence that students from different backgrounds use different learning strategies. Thus it is likely that there are asymmetries: British students of foreign languages may emphasise different learning strategies compared with Chinese students of English. At the same time, studies of learning strategies often seem to assume that a given group of learners will use the same strategies irrespective of the target language. However, it may be that the same learners emphasise different strategies for different languages.

Phase I of this study investigates students' perceptions of vocabulary learning strategies that they use in studying foreign languages: how frequently these strategies are used and how efficient they are believed to be. Questionnaires were analysed from 359 Chinese learners of English, 276 British learners of French, and 80 British learners of Mandarin. The first and last groups were also interviewed in depth.

The results suggest that there are a few similar patterns of learning strategies between the three groups. However, there are a large number of significant differences in emphasis in the use of key strategies. Thus, it seems that there are two types of asymmetry in vocabulary learning strategies: those that stem from cultural background, including academic cultural background, and those that relate to the target language.

In Phase II, six Chinese key words are selected, firstly to ascertain differences in students' perceptions of the meanings of the words and secondly to examine their evaluations of strategies to learn these specific words. Differences between 153 Chinese native speakers, and 34 British learners who are learning Mandarin were investigated. A reference group is British who are not learning Chinese (N=41).

The results show that Chinese learners of English have a wider range of lexical knowledge than British learners of Mandarin. Furthermore, the results show that the vocabulary learning strategies suggested by British learners of Mandarin and Chinese learners of English are not significantly different from general vocabulary learning strategies investigated in Phase I. A number of conclusions, implications and suggestions are drawn from the results for cross-cultural vocabulary pedagogy.

ACKNOWLEDGEMENTS

After several years of researching in vocabulary, I found an appropriate definition for the word 'research' in my PhD context. It means 'to search, search, and search' – 'to search for knowledge, to search for reality, and to search for help'. The first two may perhaps depend more on my self, but the last one depends so much on others.

This study could not have been completed without the support of many people. My greatest appreciation goes to my supervisor, Professor Martin Cortazzi, who was promoted to his professorship at about the time I was completing my PhD thesis. With his patient guidance and his belief in me to complete this study, I found assurance and encouragement to go through this process. Thanks also to other teaching staff and librarians in the School of Education. I would like to give my special thanks to Dr. Anthony Pell and Mr. John Beckett, who equipped me with the fundamental knowledge of statistics which was suitable for my research.

Thanks to all the teachers and students who have directly participated in this study. Without their co-operation, this thesis could never have been completed. In particular, many thanks to Dr. Qian Kan at the University of Cambridge, who I encountered in my research field trip to collect my data. And from then on she has been like a mentor to me. Through her recommendation, I also got opportunities to strengthen my working experience in translating and interpreting.

I also appreciate those who were indirectly involved in my research study, but have offered me their professional insights. I particularly thank Dr. Lixian Jin, and Mr. Steve Cooke who opened the door for me to work as a bilingual instructor in two primary schools, where I met warm-hearted colleagues like Gaynor Hudson and Julie Stapleton, and lovely school children.

Finally, I am profoundly grateful to my family and many dear friends. On the one hand, they shared their joy with me when I feel some achievement in this PhD process, and on the other hand, they offered their shoulders for me to cry on whenever there were some downfalls. Many thanks to Dr. Lian Lu's care for my family. Thanks also to my Christian brothers and sisters (Di and John Graves, John Forknall, and Alison Evatt) for their prayers. This study is dedicated to my Heavenly Father (Jesus), my parents on earth (Mr. Yen-Bei Shen and Mrs. Su-Yun Shenxu) and my brother (Professor Yi-Fan Shen) for their great provisions in my life, *always*.

TABLE OF CONTENTS

CHAPTER 8

CHAPTER 9

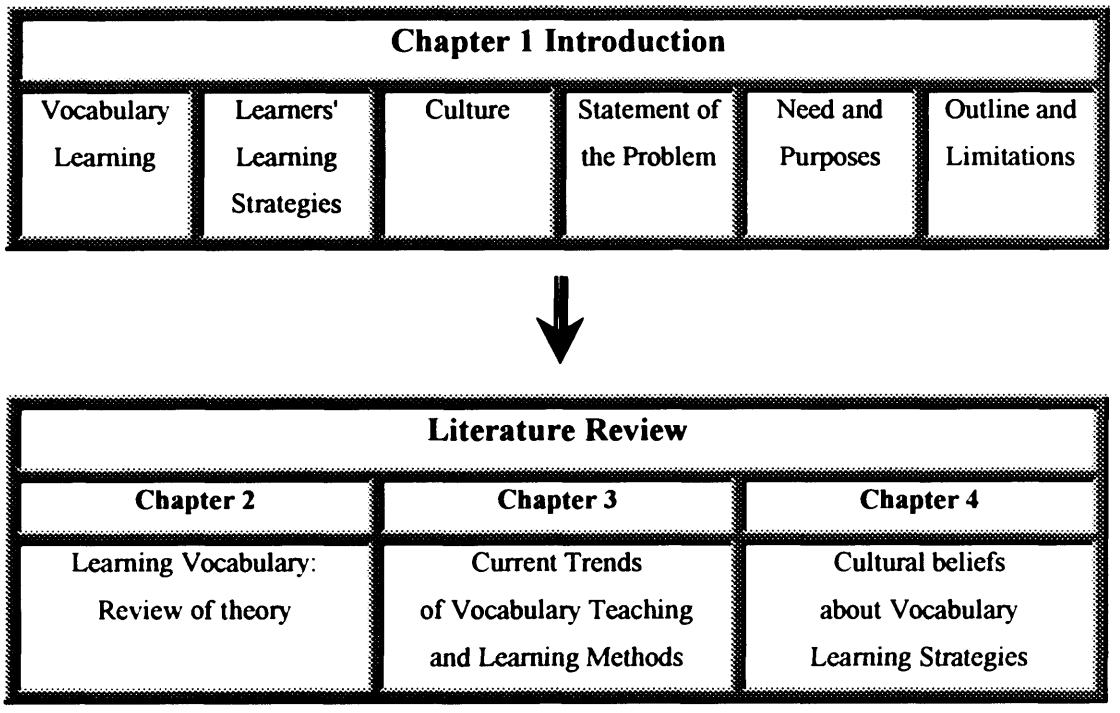
LIST OF TABLES

LIST OF FIGURES

Part I

Contextualisation of the Research and Its Framework

Part I introduces three broad research interests that frame this thesis. General statements of problems resulting from these areas are discussed. The need, purposes and outline of this research study are delineated, and its limitations are considered. Detailed literature reviews follow.



CHAPTER 1

INTRODUCTION

1.0 Overview

When students learn a foreign language[1], many think that learning vocabulary is fundamental, important, but difficult. Researchers and teachers commonly hear numerous comments like this: "My problem is to use the words..." (Wenden 1986b: 192), "I'm watching my English by learning more vocabulary... English consists of words and I think I should learn more vocabularies... I may translate all the words, but I don't know what they're talking about" (Wenden 1987: 106). In an investigation in a specific Chinese context, Cortazzi and Jin (1996a: 153) found that a typical comment from students was that vocabulary was "the most important thing" when learning a foreign language.

Such students' awareness of the importance of vocabulary has apparently come to the point that their overall language competence and performance has much to do with vocabulary and their beliefs about it. For example, in writing, vocabulary was found to be one of the basic strategies in the students' repertoire which distinguished themselves as good or bad writers, according to their own self-rating (Cohen 1987b).

While many teachers and researchers are aware of student beliefs and styles of learning a second language (L2) in general (e.g. Nunan 1988; O'Malley and Chamot 1990; Oxford 1990; Reid 1987, 1995), little specific knowledge is available about how students learn vocabulary, or favour particular vocabulary learning strategies. There is comparatively little research on learners' strategies for vocabulary learning (e.g. Schmitt 1997) nor have students' comments been analysed to see differences or similarities of strategic adoption from one particular linguistic or cultural group of learners to another. Furthermore, little information is provided as to whether their

[1]See Section 1.8 (1) for the definition.

learning methods differ according to the nature of target words (e.g. Ellis and Beaton 1995).

The present study attempts to fill this gap by examining British and Chinese students' beliefs of learning vocabulary in Chinese and French, and in English respectively. The study brings together three relevant aspects of learning vocabulary: (1) the importance of vocabulary together with the complex nature of learning it, (2) students' beliefs of their vocabulary learning strategies, and (3) learning (including teaching) strategies under the constraints of learners' culture and target language.[2] These aspects provide a background in this study for developing cross-cultural research into British and Chinese vocabulary learning strategies in terms of learning general vocabulary and in learning six specific but difficult cultural keywords in Chinese.

This chapter outlines current research interests in the importance of vocabulary and learners' learning strategies, and of possible target language and cultural differences. It then discusses the general problems arising from the above three areas of interests. It states the focussed purposes and objectives of the study. The significance and predicted limitations of the study are also indicated. Finally, the organisation of the whole thesis, definitions of key terms, and frequent abbreviations are provided.

1.1 Current interests

1.1.1 The importance of vocabulary learning

In language teaching pedagogy, vocabulary used to be considered as an aspect of learning easily handled by students, so there was apparently little need for special emphasis on it when teaching in classrooms. Priority, in the structural perspective, was given to the learning of syntax. Lexis was learned incidentally and depended on

[2] See Section 1.8 (2), (3), (4) & (5) for the general definitions and Chapter 4 for more detailed discussions.

other learning activities, like grammar (Carter 1987, 1998; Harmer 1991; McCarthy 1984; Nation 1990; Nunan 1991; Sinclair and Renouf 1988).

Yet many researchers and theorists have elaborated on the complexity of what is involved in learning a word (e.g. Richards 1976; Carter 1987, 1998; Nation 1990). In general, the level of knowing a word includes the depth of the ability to recognise and to use appropriately two inter-related aspects: linguistic and pragmatic ones. On the one hand, the size of the vocabulary of English, for example, can be as big as over 50,000 word families (Carter and McCarthy 1988b; Goulden, Nation and Read 1990; McCarthy and Carter 1997; Nation and Waring 1997). On the other hand, regarding the depth of knowing these words, there are fuzzy boundaries for the systems of meanings, and there are complicated links between syntactic factors and systems of meanings in an L2 learner's mental lexicon (Aitchison 1992; Aitchison 1994; Channell 1988; Meara 1984; Singleton 1999).

Overall, this may imply that a word has its complexity within the frame of a language, so learning vocabulary is not as easy as it was conventionally thought to be. And enhancing learners' vocabulary obviously promotes learners' L2 overall language ability (Carter 1988; Harley 1995; Nation and Coady 1988). It is, then, important to pay attention to learning vocabulary.

Within L2 language pedagogy and L2 acquisition research studies, there is a clear movement to greater focus on this matter (Allen 1983; Arnaud and Béjoint 1992; Carter 1987, 1998; Carter and McCarthy 1988a; Coady and Huckin 1997; Gairns and Redman 1986; Harley 1995; Hatch and Brown 1995; Jackson 1988; McCarthy 1990; Nation 1990; Taylor 1990; Schmitt and McCarthy 1997; Wallace 1982). From the earlier recognition of the 'bypassing' status for the sake of communication to recent research confirmation of its facilitation to L2 acquisition (e.g. Meara 1996; Nunan 1991), it is now clear that vocabulary learning can be claimed to be more explicit, dominant, and specialised in L2 education (Channell 1988; Lewis 1993; McCarthy 1988; Sinclair and Renouf 1988; Willis 1990).

In order to enlarge the size and deepen students' knowledge of target language vocabulary, there have been numerous suggestions of appropriate ways of learning words. So teachers now face the challenge of "how best to help students store and retrieve words in the target language" (see, e.g. Nattinger 1988; Sokmen 1997: 237).

1.1.2 The importance of knowing L2 learners' strategies and vocabulary learning strategies[3]

Since there are many aspects of knowing a word, learning a word should involve many ways to enhance the learners' mental lexicon. It has been maintained that no single research finding or methodology of teaching L2 vocabulary can promise absolute and predictable success for foreign language learners. There is no one way to learn vocabulary. To combine methods is the most efficient approach for facilitating acquisition (Carter 1987, 1998; Carter and McCarthy 1988a; McCarthy 1990; Nation 1990). Yet, the interpretation of the 'best' or of a 'more efficient way' of learning vocabulary is not a simple task. It may depend on whether the methods represent the best ways for learners to learn successfully for various purposes. Some research studies have found that different strategies have different benefits for different aspects of vocabulary learning; methods helpful for production, reception, reading, recalling, and comprehension can be different (Danan 1995; Ellis and Beaton 1995; Ellis, Tanaka and Yamazaki 1995; Luppescu and Day 1995; Wang and Thomas 1995).

Indeed, this selectivity of vocabulary learning strategies might depend on different beliefs of each individual. Language learners (especially adults) bring their beliefs and attitudes about the nature of language and language learning to classroom situations (e.g. Naiman, Fröhlich, Stern and Todesco 1996). This must, in some measure, have an effect on their learning. Therefore, their beliefs should be explicated in order to inform the teaching of foreign languages. More recently, Nunan (1995a), among others, has mentioned that one of the alternatives to

[3] See Section 1.8 (6) for the definition.

shortening the distance between learning and instruction might be to identify learners' own preferred learning styles. He concluded that the question asked in past research on language classrooms "*Why don't learners learn what teachers teach?*" can be substituted by "*Why don't teachers teach what learners learn?*"

Thus, Nunan has been among those who advocate a change in emphasis from the teacher-centred to the learner-centred classroom, then to learning-centred classrooms (e.g. Nunan 1988, 1992a, 1993; Nunan and Lamb 1996; Renandya and Jacobs 1998). This change has highlighted that the role of the learner in language pedagogy is no longer passive, but equal, if not dominant, to that of teachers in classrooms. Moreover, these advocates of such change declare that

> "[f]ocussing on the learning process through awareness-raising tasks can empower learners by helping them to identify their own preferred ways of learning, and also assisting them to monitor their own learning" (Nunan 1992a: 11).

A clear understanding of learners' current beliefs, and practices regarding language learning is essential for an educationally productive change of this nature. This study focuses on students' beliefs of their own vocabulary learning strategies.

One needs to consider the uses and applications of learning strategies. The development of learners' own learning strategies is useful to facilitate their own acquisition and interlanguage development (O'Malley and Chamot 1990; Oxford 1990; Oxford and Crookall 1989, 1990; Wenden 1987). While some researchers are asking "What is the best, or at least, more efficient way to present vocabulary?" for vocabulary acquisition (O'Malley 1987; Brown and Perry 1991; Mondria and Wit-de-Boer 1991; Hulstijn 1992), there is a need to identify how learners manage their own learning, in order to choose suitable teaching methodologies and then accommodate these learners' learning techniques. As Carter and McCarthy (1988a: 11) indicated, "[h]ow words are taught has to take into account what we know about how words are learnt". This must include the need to know about what students believe about learning L2 vocabulary, and how they themselves say they learn it for particular languages.

Furthermore, recent research into language learning strategies has been acknowledged to have the effect of bridging the gap between teachers' language teaching methods, and of training learners themselves to be more autonomous with respect to their own language learning (Bialystok 1985; Cohen and Weaver 1998; Halls and Beggs 1998; Huda 1998; McDonough 1995; Penaflorida 1998; Ravindran 1998; Willing 1989). This recent surge of interest in language learning strategies represents important information on L2 students' ways of learning and reflections on the assumptions or beliefs underlying their choice of strategies (Abraham and Vann 1987; Holec 1987; Horwitz 1987; Wenden 1987).

The above points support the general argument that we need to know the learning strategies adopted by language learners to learn vocabulary. The present study aims to help meet this need.

1.1.3 The importance of culture differences

Learners' beliefs may partly come from their educational history, their cultural background and their socialisation into their first language (L1)[4] learning experience (e.g. Reid 1995). Such systems may be deeply rooted, and may differ cross-culturally. Studies of culture and cross-cultural communication have, in a wider context, investigated the differences of communication among individuals of different cultural backgrounds. In particular, research regarding Sino-American/British communication has shown that these two groups may hold different values, assumptions and beliefs, which influence their communication (Hartzell 1988; Scollon and Scollon 1995; Young 1994). Such differences can sometimes result in misunderstanding or communication breakdown between speakers of these groups.

In L2 classroom contexts, cultural background has been found to influence learning styles, which refers to some stable characteristics of the ways that an individual responds, interacts and completes learning tasks (Eliason 1995; Jones 1995b; Nelson

[4] See Section 1.8 (1) for the definition.

1995). Further, there are different styles of teacher-learner interaction between Chinese and English speaking[5] academic culture classrooms (e.g. Jin 1992; Mohan and Smith 1992; Stebbins 1995; Tsui 1996). Many Chinese students have found it hard to adjust to academic differences in Britain (or North America) regarding aspects like writing assignments, completing tasks, discussing in groups or in class, interacting with supervisors and the like. A major reason for interactional differences may be observed from the differences of literacy practices (Parry 1998). There is generally a lower frequency of teacher-student interaction and student talk in Chinese classrooms. Chinese styles of learning are often perceived by others as memorising, rote learning, and constant repetition of practices. In contrast, Western (British or North American)[6] styles of learning are seen to be creative and spontaneous when involving group work or discussions in classrooms. Where there are extremes or conflicts between the two learning styles, there may be frustrations.

Therefore, if this can happen in foreign language teaching and learning, then it seems reasonable to assume that there may be certain cross-cultural differences of vocabulary learning strategies. Some learning strategies are perhaps inadvertently emphasised by native and foreign teachers[7] and learners, but these may be different from those favoured by students from other cultures. Cortazzi (1990: 60) has commented on one aspect of a Chinese culture of learning vocabulary:

> "Learning to read Chinese is seen as requiring some analysis of character components, but consists mostly of memory, hard work and rote learning. Arguably this is because of the nature of Chinese writing, but it occurs in an educational setting which may emphasize these qualities in any case. Consequently, Chinese learners are likely to perceive reading skills as involving: the need to know vocabulary; to memorise words; to read slowly and carefully, a word at a time".

In addition, due to constraints of analysing individual characters, it has been found that Chinese students tend to focus on single items. So when reading English, their reading speed is slow and comprehension of sentences extending to whole texts is

[5] See Section 1.8 (4) for the definition.
[6] See Section 1.8 (3), (4) & (5) for the definitions.
[7] See Section 1.8 (7) for the definition.

limited (Haynes and Carr 1990). Although there is no intention to condemn a transfer of learning strategies from L1 (say, Chinese) to L2 (say, English), it seems that such strategic transfer deriving from a fundamental word-handling emphasis may not always work effectively in reading English.

Moreover, within developments of seeing language learning in a cultural perspective (e.g. Hinkel 1999; Byram and Fleming 1998), it seems important to be aware that adult language learners from one cultural background employ experiences of their dominant culture when they encounter another language and culture. Their knowledge of L1 vocabulary and skills of approaching L1 vocabulary may have important roles when learning another language. Therefore, learning foreign language vocabulary involves a process of intercultural experiences (however indirectly) in terms of both knowledge and skills. In one recent development, there is a specific focus on presenting target cultures through vocabulary in L2 classrooms and on facilitating second culture acquisition (e.g. Heusinkveld 1997; Hinkel 1999). Such a development does not necessarily demand that full immersion in the target culture is the only route of encouraging language acquisition. Rather, it assures the beneficial effects of using an explicit and external interaction with learners' L1 and with other L2 learners in a foreign language classroom as long as materials or strategies are sensibly and appropriately used (Cortazzi and Jin 1999; Lantolf 1999; Scollon 1999).

1.2 General statement of the problem

In fact, research into language learning strategies has found that learning strategies can be culturally loaded, in that the underlying methods used by different ethnic groups may largely consist of culturally bound features (Politzer and McGroarty 1985; Thompson 1987b; Wenden 1987; Skehan 1989; Oxford 1990). Given that unique cultural constraints can impinge on language learning, there are many aspects, including vocabulary learning strategies, where any search for an explanation of behaviour needs to take into account the assumptions held within different cultures. However, this area remains unclear and the cultural dimension is

seldom addressed in vocabulary learning strategy research, despite calls for more research in this area (O'Malley 1987: 134; O'Malley and Chamot 1990:165; Cortazzi and Jin 1996a; Schmitt 1997).

Moreover, there have been two general problems in the language strategy research studies (from the viewpoint of the present study). First, little attention has been paid to learners' own beliefs of vocabulary learning both in the literature on language learning strategies and with regard to vocabulary acquisition, despite the above mentioned calls for more research in this area. Many studies are quite general in their coverage of language skills, with little specific focus on vocabulary (e.g. O'Malley and Chamot 1990; Oxford 1990). Very few studies have investigated the vocabulary learning strategies used for learning different words. For example, words which consist of specific cultural concepts in one language can cause problems in relation to concepts for the other language. As Ellis and Beaton (1995: 113) argue:

> "When the native language does not encourage the distinction between concepts, then students necessarily will have an additional conceptual chore in learning the FL that relies on these very distinctions. The greater the mismatch, the greater the problem".

L2 language learners, especially adult learners at university level, often need to acquire both 'schematic' and 'systematic' knowledge' (i.e. 'declarative' and 'procedural knowledge' of target vocabulary (Robinson 1989; Widdowson 1990) by their own efforts. During the process, they may need to use their pre-framed L1 knowledge to comprehend new L2 language vocabulary. The words they encounter can be difficult for them to learn due to the knowledge gap between two languages. For example, Fan (1998) found that technical items are difficult for Chinese students to learn because it is difficult to recode the terms in English, and subjects' conceptual knowledge of the target English terms was rather low.

In learning L2 vocabulary, L2 learners will often encounter meanings of the target items which differ from the corresponding meanings of the L1. Such differences may lead to cultural or semantic interference or transference. Such differences are generally likely to be more problematic if there is a big gap between the two cultures

(Byram 1989). Alternatively, L2 learners may need to build up systems of lexical meanings in L2 which may be separate from L1. For Chinese learners of English and British learners of Chinese, the target language is not only linguistically distant from speakers' first languages, but also culturally, semantically and orthographically unfamiliar. This is likely to mean more learning difficulties or challenges (e.g. Swan 1997). Therefore, it is important to integrate cultures into foreign language learning by developing strategies which may lead students to understand cross-cultural differences and to enhance their intercultural communicative competence (e.g. Dirven and Pütz 1993). In one recent development, there is a specific focus on presenting target cultures through vocabulary in L2 classrooms (e.g. Heusinkveld 1997).

Nevertheless, many studies tend to be carried out as if in a cultural vacuum. Overall, little attention has been paid to specific vocabulary learning strategies which may be influenced by the cultural beliefs of students. Little is known about what learners from different backgrounds actually do, or say they do, in detail, in order to learn vocabulary. Yet this seems central to advancing vocabulary learning theories or to construct and consolidate pedagogic approaches and improve materials and practices (Oxford and Crookall 1990).

The present study attempts to meet this need to know about students' L2 vocabulary learning strategies with specific reference to Chinese university students learning English and to English speakers learning Chinese and French. It will, therefore, explore vocabulary learning strategies within two ethnic groups of foreign language learners working with these target languages. It will focus also on some cultural aspects of vocabulary strategies.

1.3 Delineation of research purposes and questions

The study consists of two phases. Phase I first gives a brief background of the general contrastive cultures of learning which have been found for the two ethnic groups (Chinese and British students). Then it presents a similar contrastive culture

sketch for vocabulary learning. Finally, it will report a questionnaire study of Chinese university students' learning of English vocabulary, and English university students' learning of French and Chinese. The study may go some way to see if learners' vocabulary learning strategies are rooted in cultural factors, or whether such a notion is just a stereotype, as Willing (1988) claimed:

> "None of the learning differences as related to personal variables were of a magnitude to permit a blanket generalisation about the learning preferences of a particular biographical sub-group. Thus, any statement to the effect that 'Chinese are X' or 'South Americans prefer Y',...is certain to be inaccurate. The most important single finding of the study was that for any given learning issue, the typical spectrum of opinions on that issue were represented, in virtually the same ratios, within any biographical subgroup" (pp. 150-151).

It is important to note that the labels 'British' or 'Chinese' are used for statements about samples of university students in different countries with their own cultural backgrounds. Such labels do not mean that there is any assumption that any or all individuals within these groups will necessarily be characterised precisely by such statements in this research, nor does it imply any presumption that all learners belonging to those groups will necessarily follow any identified group trends. Moreover, there is comparatively more ethnic diversity in Britain than in Taiwan, "in terms of the language and cultural traditions" from which the students come (Reid 1990: 66). Such statements using these labels are, rather, general statements relating to group trends, as is the case in much social science research.

The present investigation was guided by the following initial sequential questions:

- How frequently do learners in the sample say they use the listed methods?
- How efficient do they think these methods are?
- Are there any differences or similarities of frequency and efficiency of use across the samples regarding the responses?
- What are the most frequent and efficient, less frequent but efficient, more frequent but less efficient, and both less frequent and efficient methods?

Phase I investigates the learners' vocabulary learning strategies in general, unrelated to any specific lexical context. To counter this potential criticism, Phase II investigates a set of specific lexical items, to research the learners' understanding of them and to see how learners believe they might be learned.

Phase II is an exploratory investigation. It intends to show any differences of word knowledge, and potential learning strategies of words which embody cross-cultural concepts between native speakers and foreign language learners. Six words were chosen for this phase. It explores the 'best' strategies that subjects believe are appropriate to learn the six cultural keywords. Overall, Phase II is based on the idea that the best strategies of learning vocabulary depend not only on whether the target language word can be related to an L1 word or phrase, but whether the L2 meaning can be readily conceptualised or not in the learner's cultural experience from L1 (Redman and Ellis 1989: 3-4; McCarthy 1990: 129). Brown (1994) notices that learners can feel alienation in the process of learning a second language. This alienation may result from not only any unique teaching methods that may be used to teach the target language, but also from certain target concepts, which exist in learners' schemata differently from those held by native speakers.

Therefore, the cultural keywords, which are the focus of Phase II, may cause learning difficulties, as they are likely to be schematically organised by "making the items to be learned fit into a pre-existing framework, or by creating some new cognitive framework that would bind the items to be learned into a unit which is structured in some fashion" (Thompson 1987b: 46). Therefore, Brown (1994: 173) advocates that there is a need "to be sensitive to the fragility of students by using techniques that promote cultural understanding". Thus this second Phase involves consideration of techniques which may assist learners to acculturate to target language concepts.

The developing research questions in Phase II study are:

- Are the six words really culturally different?

- Are there differences between Chinese native speakers' responses to questionnaire items on the selected six words compared to the British students' responses?
- Are the six words' meanings considered difficult to learn?
- Are the strategies which are said to be frequently used and rated efficient in Phase I also held to be effective to learn the six cultural keywords?

Phase II therefore seeks to focus on vocabulary learning strategies and lexico-cultural understanding of a small but culturally salient set of words. This Phase thus gives a specific context of particular words within which to investigate the most frequent and efficient vocabulary learning strategies which emerged from Phase I. This kind of contextualisation or specification is conspicuously absent in most learner strategy research (Cohen 1990; Chamot 1987; McDonough 1995, 1999; O'Malley and Chamot 1990; Oxford 1990; Wenden and Rubin 1987).

1.4 Research samples: groups of learners and target languages

The study intends to explore how three groups of learners studying foreign languages in university (Chinese learners of English; British learners of Mandarin; British learners of French) use vocabulary learning strategies, and how they learn the target language in two cultures, i.e. in Britain and Taiwanese contexts.

Chinese students (the largest cultural group of learners of English worldwide) apparently believe that learning vocabulary is the key to language learning (Cortazzi and Jin 1996a). In learning foreign language vocabulary there is evidence (cited earlier) that students from different backgrounds use different learning strategies. Thus it is likely that if Chinese and British vocabulary learning strategies are compared, there will be asymmetries: British students of Mandarin or French may emphasise different learning strategies compared with Chinese students of English. At the same time, studies of learning strategies often seem to assume that a given group of learners will use the same strategies irrespective of the target language. However, it may be that the same groups of learners emphasise different strategies

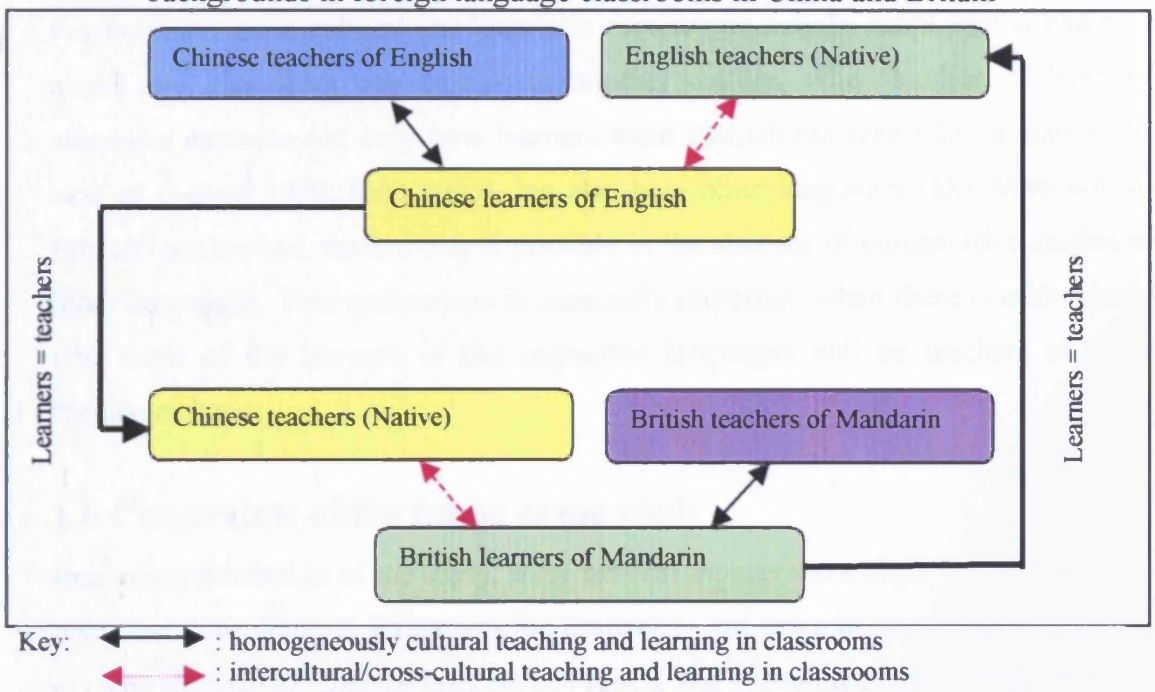
for different languages. For example, for English speakers who learn Chinese there are no cognates and far fewer borrowings in Chinese compared to French and, given the challenge of learning Chinese characters, it seems likely that British students would use different strategies for learning Chinese vocabulary compared with the strategies they use for French.

1.5 Significance of the study

Many studies have been conducted on vocabulary acquisition, on learners' strategies, and on Chinese-American cultural differences (cited earlier). However, these three areas of research have largely remained separated from each other: little research has been done to combine these aspects in a single study. This study investigates Chinese students' vocabulary learning strategies compared to the British students' strategies when they are learning an L2. It provides an exploration of how the methods may be employed differently and investigates the strategies which the learners believe have efficacy. In the second Phase, this study will focus on the context of a set of key cultural words to see how the understanding and learning strategies of Chinese and British students relate to particular words. This contextualisation of strategies is rarely investigated.

Overall, conducting this research is intended to contribute to wider aspects of cross-cultural language teaching and learning apart from vocabulary pedagogy. Recently, more and more Chinese and British native teachers teach their own languages in each other's country, and learn each other's language (see Figure 1.1), so it is urgent to know to what extent the cross-cultural gaps of beliefs of vocabulary learning do (or do not) exist. Where such a gap is smaller, L2 teaching and learning will be much easier and more efficient (Cortazzi 1990; Nunan 1988; Oxford 1990). Such a two-way comparison is necessary because it may explain more effectively the argument for the existence of 'cultures of learning', and give a relevant knowledge base to support the learner-centred, learning-centred and strategic-centred trends (Nunan 1988, 1992a; Nunan and Lamb 1996; Renandya and Jacobs 1998; Oxford 1989).

Figure 1.1: Homogenous and intercultural groups of teachers' and learners' backgrounds in foreign language classrooms in China and Britain



It may be that, rather than representing a mismatch of learning strategy with culturally conditioned student receptivity, methods of teaching English to Chinese students simply represent the cultural divide that has to be crossed in order to speak a language fluently. Or more succinctly, Chinese teaching methods for vocabulary may be derived from and are an integral co-efficient of both the nature of the Chinese language and Chinese education and culture. English teaching methods for vocabulary may similarly be derived from and are an integral co-efficient of both nature of the English language and English culture. This perhaps sheds light on another angle of the 'cultural imperialism' debate in the language classroom which imposes the values and beliefs of teaching one language to another (cf. Barrow 1990).

The difficulty that students encounter when attempting to learn a language that constitutes a considerable cultural 'leap' may be seen not as an unavoidable encumbrance but rather as a necessary process of cultural and linguistic acclimatisation. Empirical research findings from this study may provide detailed information to counter any stereotypical beliefs of how learners from different

cultures learn. This could help to minimise the degree of mismatch between learners and educators, and better accommodation and collaboration can be possible.

Furthermore, cross-cultural and linguistic comparison may be more neutral and may avoid any bias from one culture to another culture, when studies of learners' strategies examine not only how learners learn English (as seems to be mainly the case of Oxford 1990; Reid 1995), but also how other languages (like Mandarin or French) are learned. Such a bias is possible in the absence of comparative studies of other languages. This comparison is especially important when there is a likelihood that some of the learners of the respective languages will be teachers of those languages later.

1.6 Constraints of the frame of the study

Regarding the design of the study, three general aspects were identified to have their own overall limitations. Other specific limitations are given in later chapters.

(1) The absence of Chinese learners of French, and French learners of English in the study might have lost further interesting two-way comparisons. There are no complete parallel L1-L2 learners across the three target groups. But in such a project, it is difficult to find sufficient numbers of subjects in the available time. Despite this, there is some symmetrical sampling for British learners of Mandarin (BM) and Chinese learners of English (CE) in this study. British learners of French (BF) may reveal information about length of learning influence on vocabulary learning strategies, compared with BM who also have experienced similar British academic culture. Secondly, BF may have similar length of L2 learning experience to CE.

(2) Phase I did not relate to any specific words, so it may be difficult for students to make explicit the ways they learn. Although Phase II provides a focus on real words, these were a fairly small set. However, the former defect seems to exist in many strategic and L2 language learning research studies. As for the latter, further study is needed to explore more sets of cultural keywords.

(3) The choice of the language used in investigations can be problematic in a cross-cultural or cross-linguistic study like this. In Phase I, British subjects obviously

had a great advantage of answering the questionnaire (which was in English) through their L1. Chinese subjects, however, could spend more time to consider the questionnaire items. Although in the interview, they were allowed to use Chinese, they generally were encouraged to use English by their university teachers. But in Phase II, Chinese subjects have some advantage of answering the questionnaire (which focussed on Chinese words) due to their conceptual familiarity with the target keywords. It is clear that British subjects had to struggle more with this. It is difficult to solve this problem but an attempt is made in the Phase II analysis (using the NSM approach detailed later).

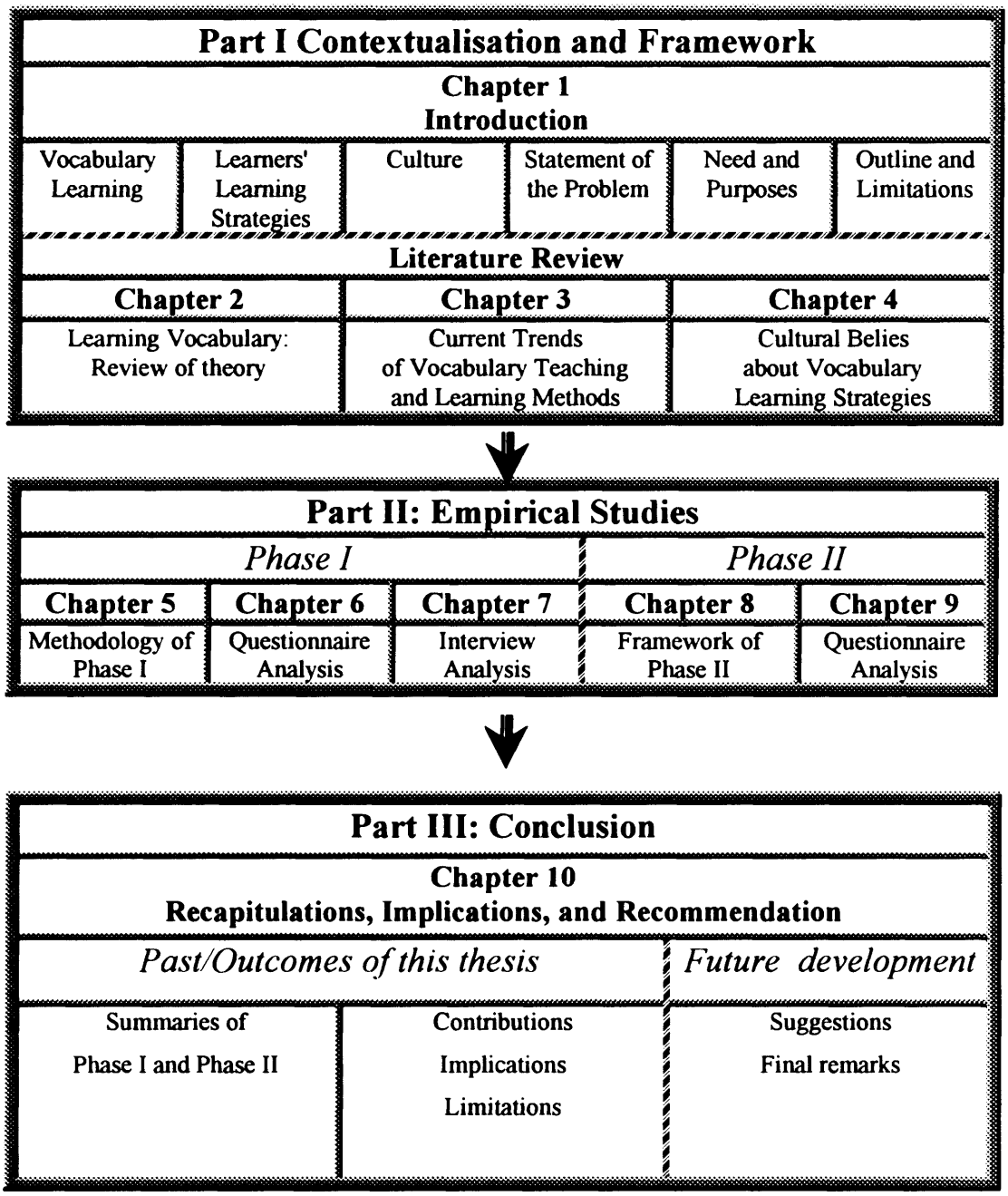
As this study is regarded as exploratory, any interpretation is directly applicable for the chosen subjects as a whole, but can only be generalised with caution. Any implication for the general population is reserved for further research with larger numbers of subjects, or more careful control of the subjects' background. Despite these three limitations concerning the research design, this study was expected to reveal some interesting aspects in at least two general academic cultures of learners' vocabulary learning strategies in Britain and in Taiwan: it also may reveal the cultural differences of knowing the cultural keywords, and problems of learning them through translations.

1.7 Organisation of the study

This study consists of ten chapters (see Figure 1.2). This chapter has introduced the study including some background concerning the importance of vocabulary, statements of the problems and significance of the study. Chapters 2 to 4 review the literature related to this study. They cover aspects of the theoretical background, pedagogy and cultural issues relating to vocabulary learning and teaching. Chapter 5 discusses the framework of this study. It includes the hypothesis, assumptions, and process of conducting this research. Its specific limitations will be discussed at the end of the chapter, although some have already been outlined here. Chapter 6 analyses the quantitative data of Phase I. It considers the methods and processes of analysing the data, the results interpretations and further discussion. Chapter 7

provides some qualitative data from interviews and open-ended questions in the Phase I questionnaire, which supplement the quantitative results. Phase II starts from Chapter 8. It provides the research justifications for this Phase, including the reasons of choosing the set of six Chinese cultural keywords. In Chapter 9, the analysis and interpretation of Phase II will be presented. It also includes discussion of the link with Phase I. Finally, Chapter 10 will summarise the study and give further research suggestions.

Figure 1.2: Research processes and the structure of the thesis



1.8 Definitions, Abbreviations, and Typographical conventions of the study

Definitions of some popularly discussed terms in Applied Linguistics, frequent abbreviations, and typographical conventions used throughout this thesis are listed.

(1) L2 and L1 learners: In this study, 'foreign language learners' particularly refers to those learners who learn a new target language in their own native countries. In other words, they normally do not use the target language in their daily communication. L1 language refers to mother tongue, and may include the dominant language which is used as national language, so that it is used in daily communication. The target languages in this study are foreign languages for the participants. At times, this study has a less restricted use of the term between foreign and second language (L2), and between L1 language and mother tongue. It does not intend to invoke the strictest distinction between these respective terms.

(2) Culture: it includes learners' background knowledge, former educational experiences, cultural traditions and socialisation (e.g. Reid 1995). Important aspects of culture in this study will also be termed 'academic culture' (e.g. Jin 1992), and 'culture of learning' (e.g. Cortazzi and Jin 1996a, b, c).

(3) Western culture: In this study, Western particularly refers to the North America, Britain, and several European countries where most of the English Language Teaching (ELT) subjects, materials and theories have been developed in recent decades. Especially, the researcher is more familiar with the British culture. Caveats about possible overgeneralization or stereotyping obviously apply here.

(4) The term 'English-speaking' is used here to cover British and American. It implies, of course, a wide variety of other cultures, too, (including Australian, Canadian, Singaporean and others), but while such variety is acknowledged, it is not investigated or discussed here. The main empirical focus here will be on British students among the English-speaking cultures, but much of the relevant literature concerns American students or international students in the U.S.A.

(5) British: The term British refers to students of British background who study foreign languages in British universities. This term is clearly not unproblematic since it must encompass the multicultural diversity found in modern Britain,

including some students of multiple heritages. This problematicity is recognised but not explored in detail here; the present emphasis is on the contrast between British and Chinese, with discussion of group trends.

(6) Vocabulary learning strategies: The terms, strategies, methods, techniques, or skills are interchangeable in this study, though there are slight differences for some scholars in Applied Linguistics (see McDonough 1995 for detailed discussion). However, the term strategy is generally acceptable as a loose, more general term for chosen behaviours adopted to learn (Oxford and Crookall 1990). Hence, it refers to any means that help students to learn vocabulary. This study particularly focuses on strategies for learning, rather than the ones for communicating. That is, it focuses on "language learning strategies" but not "language use strategies" (Brown 1994; Cohen and Weaver 1998).

(7) Teachers: This word may from time to time implicitly and generally applicable for referring to language educators, including materials, textbooks, syllabus, curriculum designers. However, it may not necessarily include researchers.

(8) Vocabulary: This word is interchangeable with lexicon, and lexis. Words, phrases, or idioms may be generally described as lexical items.

(9) Abbreviations for the groups of the subjects:

- CE: Chinese learners of English
- BM: British learners of Mandarin
- BF: British learners of French

(10) Typographical conventions

- Italics: for Chinese *Pinyin* (the mainland Chinese alphabetic representation of Chinese sounds and words); for interview quotes; for items as appeared in questionnaire
- Single quotation-marks: for the researcher's own emphasising expressions; for translations or equivalents of Chinese lexical items
- Double quotation marks: for quotations from other authors

CHAPTER 2

LEARNING VOCABULARY: REVIEW ON THEORY

2.0 Introduction

Many L2 learners seem to treat a target word like a piece in a jigsaw. They collect or pick up pieces incidentally or systematically in their learning processes, and eventually hope to make every piece fit correctly together so that they can build up the right picture of the target language. However, unlike a piece of jigsaw, a word is not a broken piece which is fixed and static. Rather, a word is in a network of associations with other words (e.g. Meara 1992b). Many researchers have shown how a word has many aspects (Carter 1987, 1998; McCarthy 1984; Richards 1976), and have stressed that a word *per se* is "dimensional" (cf. McCarthy 1990: 41; McKeown and Curtis 1987: 3; McNeill 1996: 43; Meara 1996: 33; Palmberg 1987a: 203; Suh 1991: 716; Verhallen and Schoonen 1993: 360). Also far from acquiring a static piece of knowledge, it seems that the process of coming to know a word is a "dynamic" mechanism (cf. Carter 1987: 88; 1998: 192; Cortazzi and Jin 1994: 15, 1996a: 156; Marco 1999: 1; McCarthy 1990: 32), as the storing of knowledge may take time, and it is periodically updated and advanced. Such dimensional and dynamic features of knowing vocabulary may underlie fundamental difficulties of learning lexis.

This chapter focuses on some theoretical aspects of vocabulary learning by discussing the dimensional and dynamic nature of vocabulary, of knowing a word, and of the mental lexicon. Further, it outlines a general contrastive analysis[8] of Chinese and English words with regard to writing systems and conceptual meanings. The main attention will be paid to these topics by specific illustration with Chinese and English words. Finally, this analysis provides one aspect of fundamental

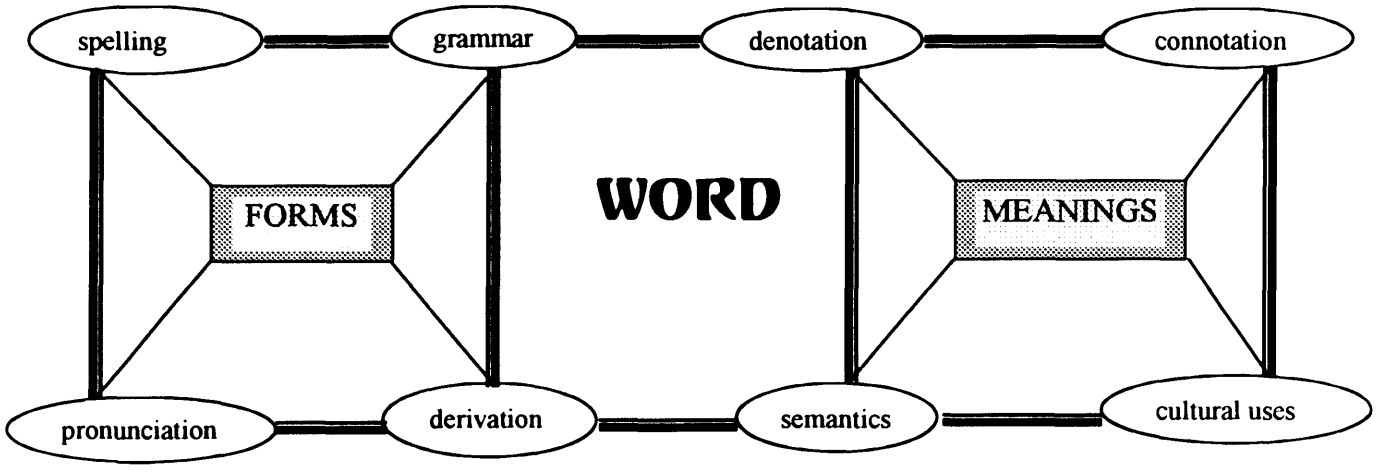
[8] 'Contrasts' or 'differences' between a Chinese and an English word discussed in this chapter mean their comparatively distinctive features. There is a danger, however, to conclude that there are no similarities at all between the two languages.

differences for Chinese and English learners learning the respective target language which are worthwhile considering in L2 vocabulary pedagogy. This basis of the awareness of differences between L1 and L2, is helpful for predicting possible difficulties, errors and development of interlanguage (James 1980; Odlin 1989; Richards 1974a; Selinker 1992), since sometimes selection of vocabulary may be biased by the criteria of the target language (Richards 1974b).

2.1 The Dimensions of a word

'Dimension' here refers to two basic aspects: forms and meanings, each of which develops more dimensions as the word is learned. The former includes grammatical rules, spelling, and pronunciation of a word. The latter consists of connotative, denotative meanings, semantic values, contextual meanings, and cultural uses (Figure 2.1).

Figure 2.1: Some dimensions of a word



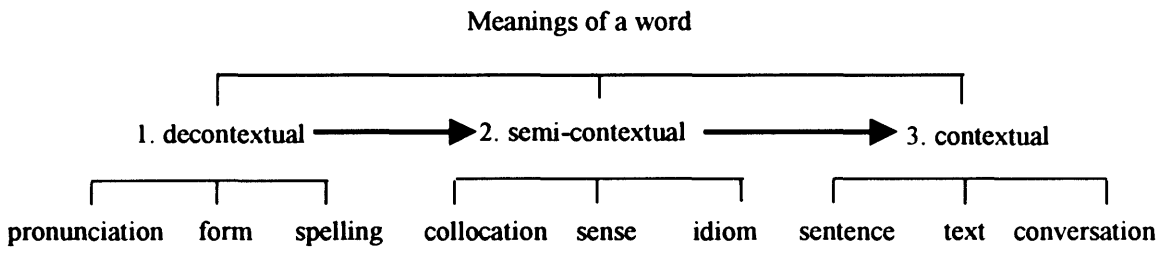
According to this view of the nature of a word, it seems easy to generalise that knowing a word is to know both formed features and meanings of a word. But in reality, the two sides still consist of various dimensions. This makes a lexical knowledge network widely extended and complicated. So such dimensions are not

likely to be as simple and tidy as Figure 2.1 suggests. More thorough discussions on the meaning of words can be found in theoretical references like Cruse (1986) and Lyons (1995). Richards (1976) presents a widely cited classification of eight dimensions which cover a learner's overall knowledge of knowing a word. He assumed that ideally to know a word involves eight aspects: (1) the degree of probability of encountering it and its associations being used in real situations; (2) its limitations of use according to function and situation; (3) its syntactic condition; (4) its underlying forms and derivations; (5) the associations between the word and other words; (6) its semantic value; (7) other different meanings of the word, and therefore, (8) the size of vocabulary knowledge may keep growing even in adulthood. Thus, to build up these dimensions of knowing a word is a long term, dynamic process.

2.2 The dynamics of knowing a word

The meanings of many words are more complicated than their forms, as forms are closed systems instead of more open sets of meanings (Cruse 1986; Krantz 1991). That is, word meanings seem to be open to change at three general levels (Figure 2.2): (1) words in isolation, (2) words with other words, and (3) words in contexts, as "word meanings are not autonomous static data" (Beheydt 1987: 57).

Figure 2.2: The dynamics and dimensions of word meanings



2.2.1 The first level

The first level is when a word occurs in isolation, and then its form, pronunciation, and spelling may represent different meanings. For example, when the English word

'change' is a noun, it can mean 'small coins', and when it is a verb, it means 'alter'. In this level, a word itself has to have the correct spelling (in writing), appropriate form, pronunciation, and at least one basic meaning. No matter how fuzzy the 'word' is by its orthographic written form, or lemma in the dictionary (see Carter 1998: 4-14 for details, and 2.4 for the differences between Chinese and English words), it should have at least one meaning. At this level, vocabulary can be analysed by linguistic rules, according to rules of word formation (i.e. word analysis), morphology, and phonology. Despite technical definitions of a word from several different criteria developed by linguists, Lyons (1995: 47) discourages unnecessary jargon. He claims that:

> "we are concerned primarily with words as expressions: i.e. as composite units that have both form and meaning... Whenever the term 'word' is used without further qualification, this is the sense in which it is to be understood...i.e. in the sense in which it is used in the everyday metalanguage when one says, for example, that a comprehensive dictionary of a given language contains, in the ideal, all the words in the vocabulary of that language. In this sense of 'word', all languages do have words."

Recently, to overcome the difficulty in counting frequency of occurrence of English words when a root word may relate to many derivations with different spellings, the term 'base word' is used to refer to a root word; the other derivations, which share similar meanings, may be categorised as members of 'a word family' (Bauer and Nation 1993).

2.2.2 The second level

At the second level, a word is seen syntagmatically in the context of other words, either in terms of grammar, semantics or metaphor. Grammatically, there are collocations which have fixed, expected, or at least common, associations with other words. There are also idioms and phrases which have relatively non-flexible internal structures. These bonded words, termed lexical phrases or chunks (Cowie 1988, 1992; Lewis 1993; Nattinger and DeCarrico 1992), may not always have the same meanings as any of the separated keywords. Semantically, a word relates to other words in sense relations (e.g. Lyons 1977, 1995), such as synonymy, antonymy,

hyponymy, or polysemy (e.g. Cruse 1986). Metaphorically, a word may be extended from its original meanings and derive more abstract meanings (Cameron and Low 1999). In this level, when a word goes together with other words, it may vary in meanings, and at times, change the original meaning of the word. For example, 'cats and dogs' in English may refer to animals, but collocated with 'rain' it may mean 'heavily' and collocated with 'fighting' means 'aggressively' or 'noisily'. Similarly, *mama huhu* (馬馬虎虎 literally 'horses and tigers') in Chinese, may denote 'horses' or 'tigers' but in response to an enquiry about progress, it equates with 'so so' in English. At this level, it is clear that a word may change its basic meaning either slightly or radically from its first level meaning. It is, then, suggested that learning words is a process of extending dimensions from the first definition level to progressively more difficult levels, including levels of contextual meaning in sentences, texts or conversations (Figure 2.2). Therefore, enhancing the competence of word knowledge at upper levels is highly demanding (Carter and McCarthy 1988a; Bahns 1993; Biskup 1992; Channell 1981; Cowie 1992; Farghal and Obiedat 1995; Moon 1992, 1997; Nattinger and DeCarrico 1992; Verstraten 1992; Visser 1990).

2.2.3 The third level

The third level is when a word is in a sentence, written and spoken discourse, and its meaning can sometimes be interpreted flexibly in this level. For example, a British TV commercial for a tea product interestingly showed the differential meanings of the word 'cheap' in a dialogue. When a son and father were enjoying drinking the tea, the son firstly commented that the tea 'is really cheap', and the father was displeased to hear this and corrected him that it 'is not 'cheap', it's just 'less expensive than other leading brands'. Obviously, the word 'cheap' has different connotations: the former refers to the price of the product, and the latter to its quality. In addition, some semantico-functional variability of words like 'swallow water' is different from 'swallow grief' or lexical items of a figurative language, which need to be analysed (Kerim-Zade and Pavlov 1989; Lazar 1996).

Contextual meanings are then reckoned as crucial, as words may be less meaningful when they are in isolation.[9] In particular, for L2 learners learning an equivalent of a word between L1 and L2 (as in bilingual lists) is problematic because the meanings do not always subjectively and precisely correspond to each other. Beheydt (1987: 56) criticises such learning of supposed equivalence as it can be "highly misleading in that they mistakenly reinforce the prejudice that the verbal and conceptual systems of language coincide" (see Chapter 3 for further discussions).

The discussion so far has argued that learners need to appreciate how lexical items occur in systems and that these are complex linguistic aspects to learning a word which are necessarily acquired over time. Target language vocabulary, although somewhat like the fundamental atoms in a language, has complicated dimensions, although it seems static to learners, it is indeed dynamic. As Taylor (1989: 254) puts it:

> "In some cases, a word was used for a gradually narrowing range of referents. A more common pattern was for a word to be extended first in one direction, then in another, with varying degrees of temporal overlap between successive extensions."

2.3 The nature of the mental lexicon

While linguists and semanticists are interested in the nature of a word by analysing the more static features of a word (e.g. Bauer 1983; Lyons 1977, 1995), psycholinguists try to explore how a word itself is organised in one's mind, and how it is associated with other words (e.g. Aitchison 1994; Channell 1988; Singleton 1999).

[9] In order to collect word meanings in different contexts and investigate how the word relates to other words in the contexts, language researchers use modern computer technology to develop a lexical corpus (e.g. Sinclair and Renouf 1988). From concordancing software programmes, a target word can be analysed by its frequency of collocations and use in texts. Potentially, this is very useful for the application of language pedagogy (see, e.g. Descamps 1992; Flowerdew 1993; Murphy 1996).

2.3.1 Dimensions of the mental lexicon

The basic nature of vocabulary (discussed in 2.2) may represent the fundamental components of vocabulary stored in native speakers' mental lexicon. According to recent research investigations, the size of the mental lexicon, conservatively calculated, is between 15,000 and 20,000 English 'base words' for native speakers who are university students (Goulden, Nation and Read 1990; Nation and Waring 1997). Certainly, the number is normally smaller for non-native speakers, and for the less educated (D'Anna, Zechmeister, and Hall 1991; Hazenberg and Hulstijn 1996; Zechmeister, D'Anna, Hall, Paws, and Smith 1993). Moreover, the larger the numbers of words that can be recognised (see later in 2.3.2.1), the more words may be produced (Laufer and Nation 1995; 1999), and reading comprehension levels may be increased (Laufer 1992; 1997a).

Various attempts have been made to view the process of reaching native-speaking levels of vocabulary in terms of numerical levels of known words (Schmitt 2000). The first 2,000 frequent words will be useful for survival conversation. 3,000-5,000 word families will be the basis of reading authentic materials. Studying in higher education may need about 10,000 word families for reading coursebooks. But while figures of vocabulary size may be satisfactorily used as a reference point, it is fairly difficult to indicate precisely the size of the mental lexicon, as different researchers may not use the same objective criteria to investigate it (Bauer and Nation 1993; Horst, Cobb and Meara 1998; Nation 1993a; Read 2000; Schmitt 1998a, b; Schmitt and Meara 1997). Also, such an index of the vocabulary size often only refers to English rather than other languages, especially with regard to non-European languages, like Chinese (see 2.4).

In addition, although it seems easy to measure how many words a learner knows as more reliable and valid tests are constructed (Beglar and Hunt 1999; Laufer and Nation 1995, 1999), it is difficult to test how much a learner knows about each of them. That is, there is imbalance of a global quantitative measurement vs. a more

qualitative approach, or breadth vs. depth of lexical knowledge (Meara 1988, 1989, 1999; Meara and Buxton 1987; Read 1993; Schmitt 1999; Schmitt and Meara 1997). As indicated, there are many complications of the linguistic analysis of word meanings (see 2.2). However, such complexity exists not only in the nature of the words alone, but in the organisation of words in the minds of speakers. A rich body of research investigations has demonstrated that meanings of a word can inter-relate with other words through testing word associations (Meara 1982, 1990, 1992b; Moss and Older 1996; Vives and Meara 1994), how words may be categorised through linguistic analysis (Channell 1981; Lakoff 1987; Taylor 1989), and how many words are seen to have fuzzy conceptual boundaries through prototypical analysis (Aitchison 1992). Aitchison (1994: 74), for example, proposes that word meanings may exist like an 'atomic globule' or a 'cobweb' in our mental lexicon.

2.3.2 Dynamics of mental lexicon

The depth of the mental lexicon in an L2, especially for learners, is perhaps even more difficult to sketch, and there are still many aspects which remain unclear concerning how the mental lexicon is triggered in order to recognise and use words (e.g. Meara 1984). The following discussion highlights two basic aspects that may affect the function of L2 learners' mental lexicon: (1) receptive vs. productive vocabulary knowledge, and (2) L1 vs. L2

2.3.2.1 Receptive versus productive vocabulary

There is a problem of how to draw the line between 'passive' and 'productive' vocabulary, and which known words are more 'productive' than 'passive' (Channell 1988; Laufer 1998; Melka 1997). These two terms, 'receptive' and 'productive' word knowledge, are mentioned more frequently than the terms of passive and active words in recent research studies of vocabulary (e.g. Schmitt and McCarthy 1997), because it is difficult to decide whether listening and reading are passive or active learning. 'Receptive' and 'productive' word meanings seem more appropriate terms, because the former may refer to the words that learners can recognise, and comprehend. The latter refers to the learners' use of words, say, writing or speaking.

Apart from the use of these terms, it is still difficult to draw a strict line to distinguish the two. The reasons are, firstly, it may not be necessary to represent the two as separate learning processes, but rather as continuous and interwoven ones. That is, some word meanings for students are more frequently productive than others; there may be a cline of receptivity; and word meanings which are initially receptive eventually become more productive. Many researchers, like Channell (1988: 85), believe that productive acquisition comes naturally after receptive acquisition, because "acquisition of individual vocabulary items consists first of comprehension, then (for some items only) of comprehension plus production". Secondly, some receptive word meanings cannot necessarily be produced by students; taboo words or slang terms are intentionally avoided or there is little opportunity for students to use them (Hatch and Brown 1995). Moreover, even on a cline some word meanings remain passive for longer than others (Laufer 1998); word meanings which are more passive need to be triggered by active words associated with them (Meara 1990). Therefore, the division between receptive and productive vocabulary is transient, because lack of production may be due to choice, context and the nature of particular word meanings, not because of lack of knowledge, as such.

On the other hand, it is also tricky to say that productive word meanings as used by students are always active. Laufer (1998) indicates that some productive word meanings may not be understood by learners; they might have been learned by rote and may be actually used but are not necessarily understood by the user in context. Similarly, in a specific investigation of L2 vocabulary knowledge of Chinese teachers of English, McNeill (1996) found that correct production of word forms does not guarantee receptive understanding of word meanings; for Chinese learners it is perhaps not helpful to distinguish receptive and productive knowledge of vocabulary. Overall, the boundary between receptive and productive word meanings is fuzzy and it seems more realistic to posit a continuum of receptive-productive uses.

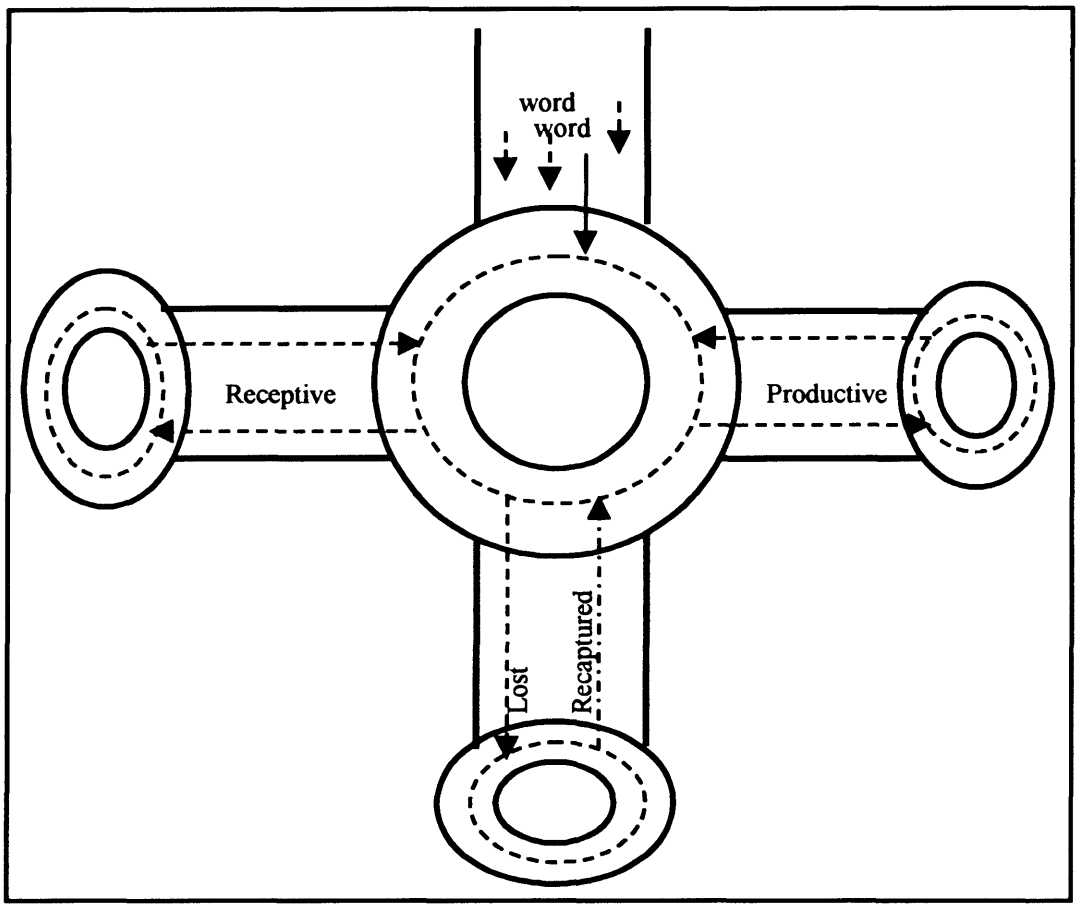
Such discussion about the receptive and productive mental lexicon seems to indicate that the mental lexicon is like an open container, as words continually flow into it. It is not "static" inside, but there is a dynamic process within it. That is, "it is constantly receiving new input which has to be integrated into the existing store" (McCarthy 1990: 42). The way it is processed is perhaps like a traffic roundabout (Figure 2.3), which can lead to different directions, and sometimes to circulation in which the same lexical item may be received or produced, or vice versa, to varying extents. In the process of learning, some words go into this mental lexicon, which is inside the square, and then they get onto a roundabout to go through a dynamic process. Some words may then remain, be recognised and be used. Whereas there are also words which are forgotten temporarily or get lost perhaps completely (Schmitt 1998a).

Such a model may be a crude way of displaying more than one aspect of the mental lexicon, yet it indicates some basic principles about learning vocabulary and how such learning works in the L2 mental lexicon. They are summarised as follows:

1. Not only breadth but also depth of vocabulary is the overall learning target.
2. Some passive words may become active by conscious and continuous training and practice.
3. Productive words may revert to passive categories or simply drop out of the mental lexicon if they are no longer retrieved and used.
4. Although some words can be long-term receptive and be rarely produced, this does not necessarily mean that they do not need to be consolidated.
5. As it is not always easy to distinguish words into receptive or productive categories, learners may not be so aware about this during their learning process. More often, learners may wish to store words by memorising as a starting point, and then leave to the future opportunities of exposure for better processing and producing.

The above five points highlight the importance of employing vocabulary learning strategies to strengthen L2 learners' mental lexicon.

Figure 2.3: Dimensional and dynamic processes of mental lexicon: a roundabout model



2.3.2.2 L1 versus L2 vocabulary

A native speaker's mental lexicon, either receptive or productive, must have provided him or her with some ability to know what an L1 word is, despite all the debate about how to count a word (see 2.2.1). However, what is counted as a word in one language may be different from what counts as one in another language (see 2.4). Further, a meaning termed a word in English may not necessarily be a Chinese word (Bauer 1983; De Francis 1984; Leong 1973; Norman 1988; Ramsey 1987; Sampson 1987).

The conceptual boundary of lexical categories (i.e. of classifying and grouping words in different domains) between Chinese and English may be different due to

their linguistic-cultural differences (see Gelman and Byrnes 1991 for the discussion on the relationship between word concepts and word meanings). Although this does not necessarily support a strong version of the Sapir-Whorf hypothesis that the lack of categories in Chinese makes for untranslatability in English, or vice versa, there are certainly many words with different concepts and perceptions (Lyons 1981). Further, Wierzbicka (1992a) argues for universal *Natural Semantic Metalanguages* (NSM) to handle 'cultural relativism' and 'ethnocentricy' where these exist. Even if there are universal categories like items in nature or human beings' bodies, there are still different sets of words in different languages with different meanings or different emphases in their meanings. This last view will be further tested in Phase II in Chapter 8.

The following discussion intends to highlight: (1) the general linguistic differences of defining what a word is in English and Chinese; (2) the detailed analysis of a Chinese word; and (3) the differences of word meanings, and conceptual meanings in particular between Chinese and English.

2.4 Linguistic differences between English and Chinese written words

English and Chinese originate from two different language families, Indo-European and Sino-Tibetan respectively. Although there are many specific structural differences in phonology, syntax and usage (Asian Language Notes 1978; Brick 1991; Chang 1987; Wong 1988), the immediately observable difference between the two languages is seen in their orthographic systems. English uses an alphabetic system, which mainly relies on letters and spellings. Therefore, once a word has been pronounced, its spelling can be guessed, even if not completely correctly, since there is fairly systematic correspondence between phonemes and letters (Deschamps 1992). Further, many English word meanings can be traced by Latin origin, and can be analysed by roots, suffixes, and the like.

In contrast, Chinese uses a logographic[10] system of written characters, which is based on using about 5% ideographs or pictographs, 5% compound ideographs, and 90% phonetic compounds (Lee, Stigler, and Stevenson 1986). These characters may represent morphemes, sounds, words or concepts, generally singly but increasingly in modern Chinese in combinations, and each character is a syllable. A character in Chinese (字 *zi*) commonly functions with other characters in combination to make more words (詞 *ci*) (see next section 2.4.1 for a further discussion). A word as a semantic unit can be frequently one character representing one syllable or more characters representing more syllables. Normally when calculating the length of Chinese texts, for example, students' compositions, it is the individual characters which are counted. For example, *dian* (電 'electricity'), *shi* (視 'vision') and *ji* (機 'machine') can be three individual characters/words (字 *zi*), but when combining them together, it is *dian-shi-ji* (電視機) which is one lexical item (*ci*) with three words (*zi*) for one English word 'television'. Knowing a vocabulary of 3,000 - 4,000 Chinese characters is considered a basis to be literate (Lee *et al.* 1986). But a word in English is generally a semantic unit. In a sense, a translation of 'a word' between English and Chinese is often not equivalent and is at times confusing. Chinese texts can be more condensed than English: in translations, Chinese texts are always considerably shorter than the English equivalent texts, not only in length of 'words' but in overall numbers of characters/words and space taken in print.

The following discussion analyses three characteristics[11] of Chinese words in order to set the stage for possible different approaches in vocabulary learning compared to English, with regard to written words. However, this discussion needs to be balanced by the possibly similar (or at least less obviously different) approaches to learning oral vocabulary. Either oral or written vocabulary learning may, of course, be influenced by other factors (e.g. teaching methods and materials), which will be discussed in Chapter 4.

---

[10] The terms 'logograph', 'ideogram', 'ideograph', 'sino-graph', 'lexigraph', 'morphograph', and 'Chinese character' have all been used to discuss Chinese written vocabulary (e.g. De Francis 1984).

[11] These three characteristics organised in this chapter are different from the six principles of overviewing Chinese etymology (e.g. Leong 1973).

2.4.1 Semantic elements

The first characteristic of Chinese words concerns semantic combinations. When combining some syllables in Chinese, different effects may occur. First, combining some symbols together can form a new character which is related to the separate elements. For example, *ri* (日) and *yue* (月) represent 'sun' and 'moon' respectively. But if these two words are put together, another word '*ming*' (明) is formed, which means 'bright'. Phonologically, this word '*ming*' no longer maintains either the sound of *ri* or *yue*, but a completely different one. However, semantically this word extends the two original senses of 'light'. This way of forming a word makes this group of Chinese lexemes difficult to pronounce when learning to read, because in these characters there are no clues to pronunciation. However, it is relatively easy to grasp the meaning, once the semantic relations are noticed.

Second, meaning clues may be systematically given, in written characters, by 'radicals'. These smaller elements, variously positioned, provide a guide to the overall meaning. Thus, the radical showing three drops of water (氵) is found in the characters for 'drench' (濕), 'drop' (滴), 'leak' (漏), 'drown' (溺), 'deep' (深), 'float' (漂), 'damp' (濕), 'bathe' (洗), etc. A knowledge of the 214 radicals gives a learner some analytical insight and a system for remembering parts of thousands of characters and is therefore extremely useful. The traditional system of radicals is also used to locate characters in older dictionaries, together with the number of strokes used to write a character. This system is still necessary to learn to locate items in a dictionary whose pronunciation may not be known.

Third, there are words which can be analysed by the rule of prefix or suffix. For example, like the syllable *di* (第), it can be a morpheme. When it is put before the word *yi* (一 'one'), then the two syllables become *diyi* (第一) an ordinal number 'first'. But if *di* suffixes after the syllable *deng* (等 'rank'), the two syllables form a noun *deng di* (等第), which still means 'rank'. Another common prefix morpheme is *lao* (老) literally meaning 'old', but in modern Chinese, when it is put before *shi* (師,

ancient term for 'teacher'), it is simply used as a morpheme denoting 'respect'. According to Ramsey (1987), suffixes are more common than prefixes in Chinese.

Overall, this semantic characteristic indicates that Chinese characters may be combined together to form different sets of words. Also, the meanings of complex characters, there is a great possibility that meanings of compounds can be analysed if the component elements are known. This may imply that learning Chinese involves analysing single words, and such word-handling strategies may extend to learning English as an L2.

2.4.2 Phonetic elements

The second characteristic relates to pronunciation of written characters by using phonetic elements. Some elements in complex characters often function as a phonetic clue to pronunciation of the whole character. For example, the word *ren* (仁), which consists of the left radical *ren* (亻), and the character *er* (二), and retains the same pronunciation as the left radical. However, this feature does not guarantee an immediate start to reading the word unless a phonetic element is known first. Such a phonetic element is often a guide to the pronunciation, but often only a rough guide (Sampson 1987). Without knowing this element it is not possible to pronounce the character unless the pronunciation is already known. There are different sets of rules for many words which have more than one phonetic element. In a word like '*cheng*' (誠), pronunciation follows the right phonetic '*cheng*' (成), rather than the left one '*yan*' (言).

Therefore, to aid the learning of pronunciation in reading, unlike English which has a more direct relationship between letters and phonemes in English, Chinese words are coded by completely different phonetic symbols. These are learned by both foreign language learners and Chinese speaking learners. There are two main systems which have been developed as traditional aids to learning Chinese characters and to pronouncing unknown words. These systems were originally developed for Chinese primary children or adult literacy classes but are also widely

used by learners of Chinese as a foreign language (see Appendix A). One is *zhuyin fuhao* or *Mandarin Phonetic Symbols* (MPS). This system is mainly used in Taiwanese elementary-level education and is found in Chinese or foreign language books published in Taiwan. The second is *Pinyin (Romanisation)* which has been used in Mainland China since 1958 and has been commonly adopted in Chinese or foreign language books published in China and in many other countries since 1979, replacing the older Wade-Giles (Yale) system. In the early stages of learning, these symbols function as an important medium to read and to learn new words, and to locate them in newer dictionaries. The systems are taught in early primary stages before character learning. This focus on learning phonetic symbols also extends to learning English as an L2 for Chinese learners, particularly for written forms. The present study cites Chinese words in Pinyin.

2.4.3 Beyond the semantic and phonetic revelation

In the third characteristic of Chinese words there may be no superficial clue for either phonology or semantics: many characters combine to give multiword forms. In reading these characters, a novice cannot necessarily deduce the overall meaning from the elements. For example, the written form *peng* (朋 'friend') seems to combine two *yue* (月 'moon') forms, but there is no obvious semantic or phonetic relation between the meaning of *peng* and *yue*. Therefore, when learners extend the learning of the single characters, it remains important in order to recognise and read multiform words after mastering the phonetic symbols.

The distinction between 'character' and 'word' in Chinese is not always easy, since morphemes as independent units of pronunciation are symbolised as characters, but since they are relatively free to combine with other morphemes, there is no clear notion of 'word' as a unit larger than the morpheme (Sampson 1987). Morphemes (characters in writing) are strung together without any indication of word boundary. According to Norman (1988: 155), "[a]lthough it is fairly easy to identify words intuitively in Chinese, it is much more difficult to define the concept rigorously." Initially, learners of Chinese are likely to focus on characters rather than words, but

later they would understand that "[b]y far the greatest number of words are compounds of at least two morphemes" (characters) (ibid.: 156).

So, recognising a written form of a Chinese word depends on various characteristics, but in some respects, it is easy to count the number of Chinese words compared to English ones. For Chinese written vocabulary, a character should be written in a single square form, as seen on the writing paper used in schools, which consists of rows of blank squares in which learners write characters. A character occupies one square only. Further, in schools (for essays) and in Chinese software programmes, it is the number of the characters which is always counted, not the number of words. As mentioned earlier, many characters are in themselves, 'words', but many 'words' are a combination of characters. Therefore, arguments for counting a semantic unit as one word or two words are diminished, although there is a slight problem in that the numbers turned up may not mean the exact 'base form' of Chinese words. Also, there is no equivalent debate in Chinese as there is in English to clarify word-morpheme relations. There are a few grammatical morphemes in Chinese, like *guo* (过), *le* (了), *de* (的), and every meaningful character can be counted as a word/character.

Overall, these considerations may show that the definition of an English word is not always applicable to define a Chinese word or vice versa. However thoroughly the meaning of a word can be defined by English, the meanings can still be fuzzy, and can be linguistically different from one language to another. As Bauer (1983: 9) indicates, "...whatever a word is, it is not the same thing in all languages: it may not be possible to provide for this sense of 'word', a definition which is valid in all languages except 'a word is what native speakers think a word is'".

2.5 Conceptual differences

So far the emphasis of the word differences between Chinese and English has only focussed on the first level regarding the written word and its form (Figure 2.2, p. 25). The difficulties of learning words at this level may be largely limited to the

beginning stage. Learning word meanings in the higher levels involves morpheme-combinations in compound words and phrases, eventually extending to more complex concepts (see Figure 2.2).

The incompatibility of boundaries of the conceptual meanings of words, and a possible linguistic contrast between L1 and L2 (see 2.3) may cause problems in translating (or comprehending), despite the argument that "...very often if not always, what has been said or written in one language can be said or written in another" (Lyons 1981: 305). But the question of how precise the translation (or comprehension) is seems to be another issue (e.g. Bassnett 1991; Hatim and Mason 1990; Newmark 1991), as conveying the message well is not the same as perfect equivalence. As Newmark (1996: 56) comments:

> "Typically, only certain technical terms...and international institutional terms...have perfect translation equivalence on all occasions; the remaining words only have perfect translation equivalence in respect of the message to be conveyed, not of the nuances of meanings in the word".

Lyons (1981: 308) clearly acknowledges that some words, which represent culture-bound concepts are "more highly codable in some languages than they are in others".

Many research studies have highlighted the lexical gap of schemata between English and Chinese culture (Bloom 1981; Hartzell 1988; Yang 1998). The most discussed lexical categories have covered terms of colours, food, kinship, socio-cultural, philosophical values and so on. Aitchison (1992) found that advanced adult Chinese learners of English fail to recognise that English categorise 'goose' as a 'bird' due to the different semantic boundaries of Chinese. Although it is difficult to indicate exactly how many words differ in this way, the prediction is that the number is not small according to some studies of translation (Bassnett 1991) and referring to the development of the universal semantic metalanguages (see Chapter 8). For example, 'father' in English has an extra cultural religious dimension which is not included in Chinese. The word 'privacy' in English can have negative dimensions in Chinese

family values. In the second Phase of this study, there is more focussed research investigation on this aspect.

Overall, the above three contrastive aspects between English and Chinese only represent a partial comparison between the two languages. Such a general analysis is the first step towards a prediction of learnability in L2 lexis (Ellis and Beaton 1995; Harley 1995). Such basic differences between L1 and L2 may influence the process of recognising and producing L2 words (see 2.6). Therefore, when a Chinese speaker learns English, the original L1 mental lexicon is likely to undergo some transformation due to the new input, and vice versa. For example, Lam (1994) claims that there is a tendency for Chinese-English bilinguals in Singapore to think and articulate their ideas in English when they write Chinese, as English lexis for these subjects is easier to approach. Therefore, an envisaged dynamic process in L2 learners' mental lexicon may be like a pendulum swinging between the two parts with reference to the studies of contrastive analysis (Gass and Selinker 1983; Haynes and Carr 1990; Swan 1997). It is likely that students encounter learning problems when the organisation of the mental lexicon between L1 and L2 is different, although, as the debate about contrastive analysis showed, not every L1-L2 difference means difficulty, comparison may be useful for indicating possible problems (James 1980; Odlin 1989).

This section has focussed on differences of Chinese and English vocabulary, especially on differences of writing systems along with some linguistic forms, and differences of culture-bound concepts. The following section draws attention to obvious differences of vocabulary learning processes regarding the two different language systems.

2.6 Emphasis of word-handling strategies

Cultural-bound differences of words, along with the form differences analysed earlier, may possibly cause learning difficulties for respective learners (Haynes and Baker 1993; Laufer 1990a, 1990b; 1997b; Swan 1997). For example, if British

learners depend on phonology when learning spoken Chinese, trouble in distinguishing the tones may arise. On the other hand, if Chinese learners rely much on logographies (written forms), then they may not be used to the flexible length of English words, and can find it more difficult to recognise long words or multiword expressions (Meara 1984).

Overall, based on differences between English and Chinese vocabulary, and how the writing systems relate quite differently to phonology, it is questionable whether the vocabulary learning processes, in the beginning stage, are the same, at least with reference to written lexis. Therefore, while some lexical processing mechanisms may be applied universally (Chern 1993; Coady 1993; Taft 1991; Talamas, Kroll, and Dufour 1999), the great orthographic differences between English and Chinese may well lead to different L1 learning strategies, which, in turn, may be transferred to L2, and the impact of these differences on learning, on literacy in particular, is actually strong (Brown and Haynes 1985; Green and Meara 1987; Haynes and Carr 1990; Macwhinney 1995; Meara 1984).

Further, some studies have found that alphabetic L1 learners will need to rely on phonologic cues when learning an L2 more than logographic L1 learners, whereas logographical L1 learners need to depend on the visual cues (Aitchison 1994; Chikamatsu 1996; Koda 1989, 1997; Rossi-Le 1995). This may further support the proposition that the mental lexicon of a particular L1 and how it was acquired and how its literacy was learnt can influence the ways learners learn an L2, especially when the writing systems are completely different. This is one reason why it is difficult to draw a clear conclusion about whether the trigger of the mental lexicon is phonology or semantics (Meara 1984; Singleton 1997).

Obviously, for learning English, phonological input is useful for reading a word and writing its spelling, whereas in learning Chinese, being able to read rarely guarantees, in itself, being able to write. Further, learning to write needs special training, and cannot be mastered without repeated mechanical practice to write all

the strokes in the right order in a character. Thus, to become literate in Chinese, writing characters, analysing and memorising them are almost a prerequisite for remembering them, so that writing is part of reading. This is not the same in English, where many learners read English with little writing practice. Nevertheless, the special and long-term concentration needed to learn Chinese characters should not be stereotyped as rote learning, as such a word-handling strategy involves more complex cognitive activities than has often been understood (Lee *et al.* 1986). Besides, listening and speaking Chinese seem to be quite separate from reading and writing characters (Cheung 1992), because there are separate systems between morphemes and phonemes. For L1 children, both reading and writing are emphasised in the very early stage of learning; thus socialisation into Chinese literacy practice may be a highly influential part of the general socialisation into a particular emphasis of learning as part of a Chinese culture of learning (see 3.3.2.2).

All in all, there is a need to be aware of cultural and linguistic differences between English and Chinese. Hsia, Chung and Wong (1995) discussed some implications for teaching vocabulary after they investigated Chinese learners' (Cantonese) word organisation strategies for learning English vocabulary. They suggested that:

> "...subjects' first language orthography should feature high in a teacher's pedagogical considerations. ... Assuming that our Hong Kong learners have been taught to read Chinese characters, they will have learned to possess Chinese characters via the auditory and visual modes and to form semantic networks. The English teacher's job is to tap this potential to assist learners transfer the same strategy to learning English words. ...Learning about ESL students' cultural concepts and first language background is crucial to teaching English vocabulary as the new words learned in English may challenge the learner's existing schema to form a new framework for them. Learners may read meanings in English words that suggest a schema in the Chinese culture. The teacher has to be ready to help learners develop a new framework for slotting these new items." (p. 99)

Their comments for English teaching in Hong Kong may also apply for teaching Mandarin for British students and teaching English for Chinese students in other areas. This is also applicable to wider concept of cross-cultural vocabulary pedagogy.

2.7 Conclusion

This chapter has analysed vocabulary as a highly complicated and fuzzy part in a language system. It is not only seen as a broken piece of a jigsaw puzzle, but as a link to a whole framework of meanings in a language. Examining a word, *per se*, shows that it consists of a dimensional structure of different levels, which spreads out like an atomic organisation. With such a dimensional nature, knowing a word in a more complete sense takes time, and obviously it involves a dynamic process to enrich a learner's mental lexicon. To develop an L2 mental lexicon, it is important to recognise the differences between L1 and L2 which may be one of the main variables to influence learning behaviours. Further, there is a need to consider the ways in which teaching and learning methods may make a difference to the extension of the various dimensions of the mental lexicon.

With regard to complicated and open systems of word meaning networks, as indicated, vocabulary learning and teaching can no longer be regarded as a simple task in L2 learning, and it is certainly not as simple as to know its translation only. On the one hand, learning vocabulary has many sides, and on the other hand, it is a non-stop process to increase vocabulary size and to attain complete knowledge of L2 vocabulary. Meanwhile, the best way of teaching and learning vocabulary is difficult to decide, as teaching and learning a new word 'properly' is complicated. The best methods have to be able to enhance the dimensions of the mental lexicon, on the one hand, and to facilitate the dynamics of the learning process, on the other. It is important to consider relevant findings from both the linguistic and psycholinguistic points of view in order to draw possible applications for vocabulary pedagogy for particular groups.

Further, although there is general approval for learning words in incidental learning from contexts (e.g. Hulstijn 1992; Krashen 1989), there is still an on-going issue about what is effective and efficient intentional or conscious-raising vocabulary teaching in relation to learning strategies (e.g. Ellis 1994; 1997; Danan 1995). The next chapter discusses pedagogic issues in detail.

CHAPTER 3

CURRENT TRENDS OF VOCABULARY TEACHING AND LEARNING STRATEGIES

3.0 Introduction

With the size and complexity of the English native speakers' mental lexicon and its relation to an L2 syllabus target (discussed in the previous chapter), knowing how to teach vocabulary effectively in classrooms must be desirable, if this crucial aspect of language learning is not to be left to chance. This chapter will first briefly review the historical development of vocabulary in recent ELT. It then outlines some common vocabulary teaching strategies. These are potentially important for the present research because Phase I investigates students vocabulary learning strategies, and there is the clear possibility that such learners' strategies are derived from common methods. This chapter discusses the effectiveness of the vocabulary teaching and learning strategies that different research experiments have identified. It finally recognises that the best teaching strategies will ultimately have to match students' learning strategies. In this way, the chapter highlights general vocabulary learning dynamics, and leads to a more detailed consideration of learning strategies (Chapter 4).

3.1. Historical development and the importance of vocabulary in foreign language teaching

In the early 1980s, there was severe criticism of the neglect of vocabulary research (Meara 1980; 1984). In spite of little attention to research, the importance of vocabulary was not completely ignored in language pedagogy, even during the heydays of the development of the Communicative Language Teaching (CLT). For example, Wilkins (1972; 1974), as an early representative advocate of the Communicative Approach, clearly indicates that learning vocabulary is as important as learning grammar. He believes that near native speaking levels can be distinguished by whether learners can use, say, collocations well. Without such

ability, even if there are no grammatical mistakes, users can not be categorised as native speakers.

Allen (1983: 5) also believes that "lexical problems frequently interfere with communication; communication breaks down when people do not use the right words". This underlines the importance of vocabulary in classroom teaching, as without vocabulary, it is difficult to communicate. Nevertheless, at that time priority to teaching was given to the notional and functional aspects of language, which were believed to help learners achieve communicative competence directly, so the teaching of vocabulary was much less directly emphasised in many ELT classrooms. But certainly attention was given to the importance of integrating it in a general framework of foreign language teaching (Ostyn and Godin 1985).

There were at that time only a handful of well-known teaching handbooks devoted to vocabulary teaching in language classrooms, like Wallace (1982) and Allen (1983). However, few of their teaching recommendations were based on theories or research findings. As Carter (1998: 198) argues:

> "books devoted to practical approaches to vocabulary teaching proceed without due recognition of issues in vocabulary *learning*: for example, Wallace (1982) contains little about issues in learning with the result that teaching strategies are proposed from a basis of, at best, untested assumptions".

From the late 1980s until the late 1990s, vocabulary has been an area that has drawn researchers' interest within the mainstream of L2 acquisition (Nation 1997). Researchers realised that many of learners' difficulties both receptively and productively result from an inadequate vocabulary, and even when they are at higher levels of language competence and performance, they still feel in need of learning vocabulary (Laufer 1986; Nation 1990). One of the research implications about the importance of vocabulary is that "lexical competence is at the heart of communicative competence" (Meara 1996:35), and can be a "prediction of school success" (Verhallen and Schoonen 1998: 452).

Meanwhile, there has been an increasing output of teaching and learning handbooks or guidelines which directly focus on vocabulary (Carter 1987, 1998; Gairns and Redman 1986; Gough 1996; Holden 1996; Jordan 1997; McCarthy 1990; Morgan and Rinvolucri 1986; Nation 1990; Tapia 1996; Lewis 1993, 1997; Schmitt and Schmitt 1995; Schmitt 2000). Claims that EFL vocabulary teaching has been reformed outside Western contexts are also blooming (Chia 1996; Ding 1987; Gu 1997; Hong 1989; Hsieh 1996; Yu 1992; Klinmanee and Sopprasong 1997; Larking and Jee 1997; Lin 1996; Liu 1992; Ming 1997; Ooi and Kim-Seoh 1996; Tang 1986; Yue 1991).

Vocabulary has its central and essential status in discussions about learning a language, and has developed in particular approaches, like *discourse-based language teaching* (Carter and McCarthy 1988b), the *lexical phrase approach* (Nattinger and DeCarrico 1992), the *lexical approach* (Lewis 1993, 1997), and the *lexical syllabus* (Sinclair and Renouf 1988; Willis 1990). Selection of core vocabulary or corpus by modern technology, (the Birmingham COBUILD corpus, for example) is also systematically developed (Carter 1987, 1988; Descamps 1992; Flowerdew 1993; Sinclair and Renouf 1988; Worthington and Nation 1996). Approaches to assessing vocabulary have also become particularly specialised (Nation 1993a, b; Read 2000). Therefore, the weak or discriminated-against status of vocabulary as criticised (Levenston 1979) in both L2 acquisition research and teaching methodologies has changed and is no longer the case.

3.2 Existing Vocabulary Teaching strategies

Linguistic and psycholinguistic research findings and discussions (reviewed in Chapter 2), clearly show that some vocabulary learning difficulties result from the multi-dimensional aspects of vocabulary knowledge, and there is a dynamic process involved in learners' foreign language lexical development. Therefore, vocabulary teaching can no longer be regarded as a simple task. On the one hand, teaching may shape an L2 mental lexicon which is similar to that of the L1, yet teachers need to be careful not to 'violate' the L2 learners' L1 mental lexicon. On the other hand,

teaching aims to maintain and enlarge the dimensions of the learners' L2 mental lexicon.

Palmberg (1990) proposes two main types of teaching methods to improve vocabulary learning. The first focuses on the sense of L2 based exercises and activities, which stand as a main target of CLT, and has received much attention in recent vocabulary teaching practices and materials. The second, however, focuses on the development of learners' own L2 associations. This is difficult to build into the design of any published materials, as associations are partly dependent on learners' background of languages, and their learning experiences can be very different, especially in multi-lingual societies. Therefore, teachers need to include an element of uncertainty or flexibility into classroom activities to support the development of learners' own built-in lexical syllabus.

In general, the goals of vocabulary teaching cover Palmberg's two teaching methods. Seal (1991) classifies vocabulary teaching strategies as planned and unplanned activities in classrooms. As the terms show, the unplanned strategies refer to occasions when words may be learned incidentally and accidentally in class when students request particular meanings of the word, or when the teacher becomes aware of any relevant words to which attention needs to be drawn. To deal with the improvised nature of such teaching situations, Seal proposes a three C's method, which may start from *conveying* meanings by giving synonyms, anecdotes, or using mime. Then the teacher *checks* the meanings to confirm that students understand what has been conveyed. Finally, the meanings can be *consolidated* by practising them in contexts.

Unplanned vocabulary teaching strategies may differ from teacher to teacher, from lesson to lesson, or even from class to class. Nevertheless, no matter how much time may be spent for teaching words incidentally, it is likely that unplanned vocabulary activities occupy less time than planned vocabulary teaching strategies (see, Hatch and Brown 1995). This is because teachers normally would have prepared teaching

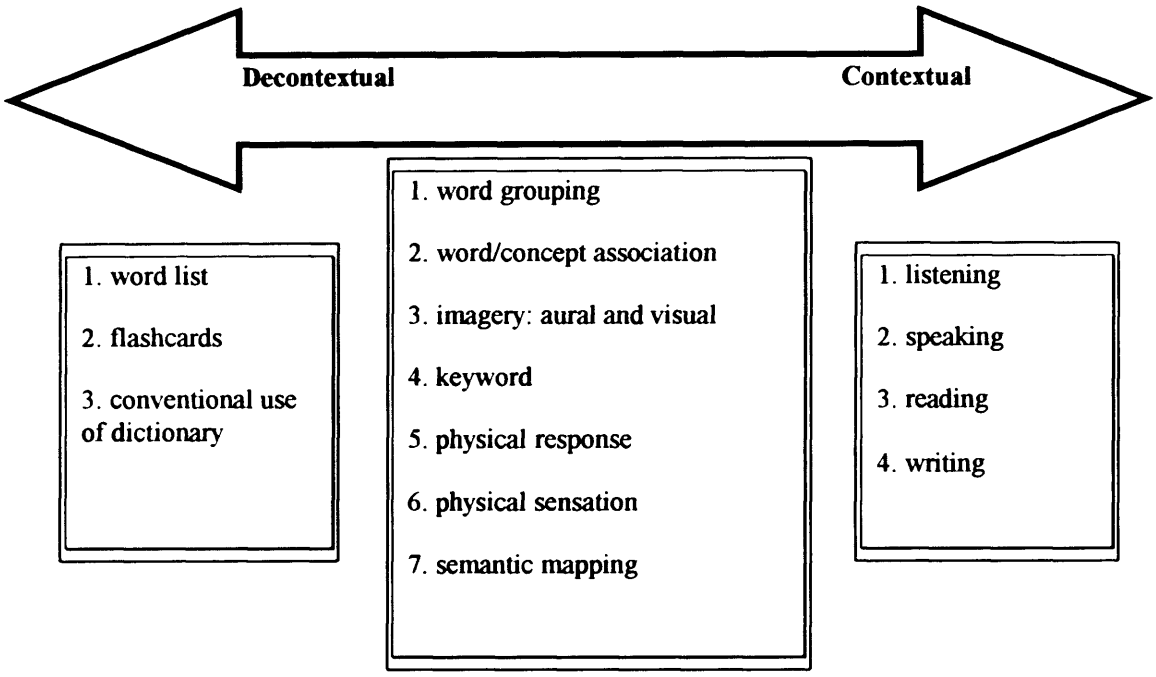
materials in advance or use a published textbook, including a listing of the target words, and these words would have been allocated more class teaching time. Certainly this is the assumption in English textbooks in Taiwan, China and some other countries, and it is the common practice of Chinese teachers to introduce, explain and exemplify such listed lexical items at the beginning of teaching any new textbook unit. But no matter how systematic the syllabus is, in normal teaching classes, vocabulary teaching seems to be unsystematic in English (see 3.5.1), and needs to be more systematic (Meara, Lightbown and Halter 1997; Nation 1997). However, some teachers may combine both approaches to keep the virtue of systematic teaching of vocabulary, while allowing for some incidental learning and teaching which may allow students to develop their personal strategies and word associations.

To analyse vocabulary teaching methods in more detail, Oxford and Crookall (1990) classified common techniques into four categorises: (1) *de-contextualising*: word lists, flashcards, and dictionary use; (2) *semi-contextualising*: word grouping, association, visual imagery, aural imaginary, keyword, physical response, physical sensation, and semantic mapping; (3) *fully contextualising*: reading, listening, speaking, and writing; (4) *adaptable*: structured reviewing. Based on their classification, and taking further the argument for a dynamic view (Chapter 2), Figure 3.1 presents a dynamic continuum of different approaches. The more towards the left, the less a word is learned in contexts and in connection with other words, while the further to the right the greater the contextualisation of the word.

Ideally, a useful way to teach vocabulary is to look at the nature of specific target vocabulary items and the organisation of learners' mental lexicon in order to relate the two together. However, the effective implementation of this is dependent upon knowledge of the particular learners' particular mental lexicon, which implies a strong measure of research and assessment prior to teaching. In practice, this is difficult. However, L2 teaching may learn from L1 vocabulary acquisition processes and principles, as is argued by Hague (1987), McWilliam (1998), Singleton (1999),

and Stahl (1986). Vocabulary teaching should be dynamic and should take into account the various dimensions of the mental lexicon (as illustrated in Chapter 2).

Figure 3.1: Existing commonest vocabulary learning strategies



Therefore, it can be argued that contextual, semi-contextual and de-contextual strategies of teaching vocabulary are all needed to help learners to learn words. On the one hand, learners need a lot of native-like input in order to absorb authentic frameworks of the target language, and to enable them to achieve native-like proficiency. On the other hand, it is necessary to use strategies to facilitate lexical consolidation in their memories. Therefore, learning words needs to involve a wide range of skills (Zimmerman 1997). This implies that it is difficult to isolate vocabulary learning strategies from one to another.

3.3 Vocabulary Teaching strategies: a 2C Model

Two groups of teaching dynamics are, therefore, suggested for an ideal vocabulary pedagogy: **contextual** and **consolidating (2C)** dimensions and dynamics of

strategies, which are parallel to Palmberg's (1990) two teaching types, and will build on Oxford and Crookall's (1990) model mentioned before. The contextual strategies are used both for lexical input and output, whereas the consolidating ones are used to restore words. The following section attempts to organise relevant research findings under these headings, in terms of their advantages and disadvantages.

3.3.1 Contextual dimensions and dynamics

Many theorists and researchers have argued that there are positive outcomes from the use of contexts to help learners to receive target words, recognise the surrounding and contextual meanings, retrieve words, restore them in long-term memory and have more appropriate lexical use in the four language skills (Carrell 1984; Clarke and Nation 1980; Coady 1993; Joe, Nation, and Newton 1996; Kang 1995; Krashen 1989; Nation and Coady 1988; Newton 1995; Van Parreren and Schouten-Van Parreren 1981). Among the four skills, reading has particularly received emphasis to quantify and qualify learners' mental lexicon through incidental, indirect, and subconscious learning, and a large body of research investigations has linked vocabulary learning with reading (Huckin, Haynes, and Coady 1993; Joe 1995, 1998; Parry 1991; Zimmerman 1997). Such learning involves inferring meanings using contextual clues to guess meanings, which teachers hope will lead learners to activate their schematic knowledge and to enhance understanding for further vocabulary retention (Hague 1987; Li 1988; McCarthy 1990; Morrison 1996; Krashen 1989; Schouten-van Parreren 1989). There are similar claims put on listening, speaking or writing in contexts (Joe, Nation, and Newton 1996; Ellis 1995). Therefore, using means like video programmes which involve visual, audio, and natural language input may encourage L2 acquisition (Danan 1995).

Thus, there is a belief that learners benefit from encountering vocabulary in native-like contexts. This should help establish or consolidate learners' schematic knowledge to improve reception and production of L2 vocabulary. Therefore, real use of words is highly valued by many teachers and learners because the ability to

use target words appropriately is itself a successful outcome. When it is necessary to identify whether vocabulary has been learned, either being able to recognise or to produce items, their use in the four language skills often acts as an index of learners' proficiency. Hence, teachers and handbooks generally advocate vocabulary activities which involve all four skills (Allen 1983; Gairns and Redman 1986; Wallace 1982).

However, contextual input is not a panacea for vocabulary acquisition (Hulstijn, Hollander and Greidanus 1996). It may need to consider which types of learning effect teachers and learners wish to gain, what the learners' levels of language proficiency are, which types of learners and their ethnic and language backgrounds are involved (Li 1988; McKeown 1985; Morrison 1996; Qian 1996). Moreover, it is important to consider the difficulty and amount of the contextual cues, and whether teachers help learners to apply the strategies in contexts appropriately. That is, using interactive activities in classrooms which may involve listening and speaking result in risks to a systematic control of the quantity and difficulty vocabulary (Meara, Lightbown, and Halter 1997). This leads to questions about the effectiveness of retention and acquisition of vocabulary through uncontrolled interaction (Ellis and Heimbach 1997; Danan 1995; McCarthy 1988). Furthermore, the uses of contexts in reading do not guarantee an increase in the quantitative size of the mental lexicon quickly, and they do not necessarily lead to immediate retention of items. In addition, inaccurate guessing and inferring may endanger what is remembered (Benssoussan and Laufer 1984; Hulstijn 1992; Laufer and Sim 1985; Mondria and Wit-de Boer 1991; Palmberg 1987a).

Overall, it is worthwhile pondering to what extent and in what pedagogic contexts that guessing from the texts, for example, is particularly inefficient for retention. Findings from studies in Asian contexts (Bensoussan and Laufer 1984; Laufer and Sim 1985; Qian 1996) imply that when contextual learning is less familiar than decontextual learning, the benefit of the former can be limited (see Chapter 4).

Furthermore, as Hulstijn (1992) clearly indicates, contextual vocabulary teaching should not put too much emphasis on the benefit of expanding vocabulary, but on understanding the form and the meaning of an unknown word from the content. Therefore, using authentic input for enhancing vocabulary acquisition should have some clear premises in order to gain the benefits (Chen and Graves 1995; Dubin 1989; Duquette and Painchaud 1996; Schouten-van Parreren 1989). For example, although Newton's (1995) case study showed that vocabulary items which were unlearned were the words unused in interaction, paradoxically there were also some words used which remained unlearned. Therefore, it is difficult to confirm that oral negotiation is necessarily positively useful for learning vocabulary in classrooms. Nevertheless, this is not to deny the useful function of drawing learners' attention to context and raising their awareness of its importance.

3.3.2 Consolidating dimensions and dynamics

3.3.2.1 Using a word list, gloss, or traditional use of dictionary

For helping learners to store new words, de-contextually highlighting the words may be necessary, as giving conscious attention is also important to learn vocabulary (Ellis 1994; Hulstijn, Hollander and Greidanus 1996; Laufer and Shmueli 1997; Qian 1996; Schmidt 1990). Activities for making notes, using word-lists, dictionaries, flashcards, games, mnemonics, word-analysis and the like can be very useful. They directly draw learners' attention to the words which need to be consolidated.

When there is a word which has been recognised as important in terms of its frequency of use or learners' needs, students may intentionally make efforts to retain it. Traditionally words are highlighted or selected through word lists to help learners to pay attention to them, to learn them and store them in memory, especially in the initial stage of foreign language learning. This technique has been regarded as a de-contextual method, and it is the most conventional strategy to 'pick up' words in a short time. There are three main types of presentation. From the most de-contextualising to the least, words may be: (a) presented alone without any contexts,

and only a simple translation or synonyms either in L1 or in L2 are provided. This type of word list can be found in some textbooks, vocabulary books or in students' own notes; (b) presented with a simple explanation, with a phrase or simple sentences; this type of word list can be found in many dictionaries or some textbooks, or students' notes; (c) extracted from texts, often from written texts, which are richer in context compared with the above. This type can be easily found in textbooks.

Word lists, no matter which kind, are usually used for raising the degree of recognition, retention, or memorisation (especially referring to rote learning). Many L2 teachers and learners believe that the use of word-lists can build up vocabulary size quite quickly, or that they can easily help them to achieve a short-term purpose (Nation 1982), say, remembering particular words for an examination. Two well-known original types of word lists used within L2 research are West's (1953) *A General Service List of English Words*, and Xue and Nation's (1984) *A University Word List* (see, McArthur 1998). There is a recent consensus that a word list can be helpful for building up general purpose vocabulary learning as a start before moving to more specific lists for specific academic purposes (Nation and Hwang 1995).

However, there is also an opposite belief concerning word lists. Many researchers argue that using word lists, or traditionally looking up words in dictionaries, will lead students to encounter disadvantages for a long-term vocabulary learning. Carrell (1984: 335) mentions that "merely presenting a list of new or unfamiliar vocabulary items to be encountered in a text, even with definitions appropriate to their use in that text, does not guarantee the induction of new schemata". She indicates that the efficiency of the teaching of new vocabulary should "be integrated with both the student's pre-existing knowledge and other pre-reading activities designed to build background knowledge". Oxford and Crookall (1990) also argue that word lists, especially with mother-tongue equivalent, are not very useful because learners "might not be able to use the new words in any communicative way without further assistance" (ibid.: 12).

The problem concerning this argument is that simply looking at a wordlist (in a textbook or students' notebook) does not necessarily tell researchers how the students use such lists in their minds. There is a tendency for researchers to assume that such lists will be learned as lists (in L2 with L2 synonyms or L1 translation) and that this is rote learning. It is possible, however, that some students use such lists more imaginatively and more meaningfully (e.g. by mentally making sentence examples or visualising contexts). The list, as a list, does not tell researchers (or students) how it might be used for learning.

However true this may be, using word-lists or any other apparently de-contextual learning strategies, including glossing, can still aid contextual comprehension (Davis 1989; Jacobs, Dufon, and Hong 1994; Hulstijn, Hollander, and Greidanus 1996). Without reoccurrence or repetition (which lists may imply) or without giving special and discrete attention to particular words in contexts, it is more likely to be difficult in comprehending, retaining, and eventually using target items. Hulstijn, Hollander, and Greidanus (1996) clearly indicate the importance of individual focus after incidental learning from texts. They recommend that:

> "There is no doubt that extensive reading is conductive to vocabulary enlargement. However, reading for global meaning alone will not do the job. For words to be learned, incidentally as well as intentionally, learners must pay attention to their form-meaning relationships. Learners should therefore be encouraged to engage in elaborating activities, such as paying attention to unfamiliar words deemed to be important, trying to infer their meanings, looking up their meanings, marking them or writing them down, and reviewing them regularly" (p.337).

Clearly, listing words could have a useful place here, but this is notable at one stage of a larger process of several stages. Therefore, despite the controversy, it has been suggested that word lists may benefit beginner learners, especially when learners can use deeper cognitive processing for words on the list. Cohen and Aphek (1980) found that students at this level can use association to retain words through word lists. They assumed that this may be because "the appearance of words in isolated lists simply means fewer distractions" (p. 223).

Such an assumption has been confirmed by a recent study of Laufer and Shmueli (1997). They found that low frequency items will be retained better by learning them from the list, with L2 glosses, and a shorter context, as short as a sentence. They argue that a better way to retain vocabulary is to direct attention to it. Although their work does not overturn the function of learning vocabulary in context when the purpose is to help learners to comprehend, they imply that when directly teaching vocabulary in class, the belief about avoiding word lists and use of the mother tongue is unnecessary (e.g. Harbord 1992). Their investigation shows that using lists is in fact less time-consuming than using contexts. A similar implication applies to debates about the effect of using mono-lingual or bilingual dictionaries (Baxter 1980; Bishop 1998; Ilson 1985; Luppescu and Day 1995; McBeath 1992; Summers 1988; Thompson 1987a), and translation (Heltai 1989), and rote learning (see below). Again, the old ideology of vocabulary teaching and learning has now gradually been replaced by increasing evidence that there are no so-called 'good' or 'bad' strategies *per se*. What arguably matters more is the meaningfulness, the use and usefulness to students of particular strategies or combinations of strategies. How a strategy relates to other strategies is therefore important.

3.3.2.2 Memorisation

There is, however, still an implication that the argument about the efficacy of word lists or other decontextual methods depends on whether the words are learned by special techniques of memorisation. The question here is not whether words are learned from a list or from another context, but how the words are learned. Guy Cook (1994) argues for the importance of rote learning for some genres of discourse, which he terms *intimate discourse*.

Memorisation is important for vocabulary learning: if words can not be remembered, few are likely to be produced properly. However, in L2 language acquisition research studies and in studies of real teaching in classrooms, memorising methods are not treated as a major concern or can not be obviously fitted into any acceptable applied linguistic theory and methodology (Pincas 1996; Thompson 1987b). While

there is evidence that memorising prefabricated chunks (or lexical phrases) of language may play a central, essential, and creative role in language acquisition (Cowie 1988, 1992; Nattinger and DeCarrico 1992), if such aspects are not on the 'central' agenda for research or pedagogy, different ways to memorise target vocabulary are unlikely to be explicitly taught.

Despite this, some research findings show the positive effect of mnemonic strategies for enhancing vocabulary acquisition. The main claimed benefits of using mnemonics were found in psycholinguistic research studies based on the ways human beings learn and remember words. The keyword method, which has as its central element, the imaginative use of student-generative mnemonics, has been regarded as one useful tool to help learners of different target languages memorise vocabulary. Several research studies have been popularised in L2 learning areas since 1970s (e.g. Atkinson 1975; Raugh and Atkinson 1975).

Further, from the linguistic and semantic points of view, keyword methods involve more deep learning processes among words. There are different types of associations generated for any given keyword (Bellezza 1981; Cohen 1987c, 1990; Cohen and Hosenfeld 1981; Kasper 1993) and applied linguists (Cohen and Aphek 1980) have found that the use of an association strategy, especially continuing the same word association, can help learners to recall words in different tasks more successfully than using no association at all. Association techniques can be valuable because they allow learners to have a deeper learning process, and the more combinations to assist that deeper process, the better. For example, Brown and Perry (1991) classified 60 Arabic-speaking university students of English into three learning strategy groups: semantic, keyword, and semantic-keyword. Subjects were asked to learn 40 unfamiliar nouns and verbs. The results showed that using a combination of the two different strategies is significantly more effective for recognition and retention than using the keyword strategy alone, and also slightly better than using the semantic strategy.

Cohen (1990: 26-28) lists nine types of association: (1) linking the sound of the keyword with L1, L2, or even L3; (2) dividing the meaningful part of the word by meanings; (3) analysing word structure; (4) grouping words topically; (5) visualising the word; (6) reflecting on word location; (7) creating a mental image; (8) using physical associations; and (9) associating with another word. As seen, keyword methods involve not only the word alone, but also its background and its relationships with other words, so that they are, in fact, semi-contextual methods, which are different from rote-learning of items in a list (Oxford and Crookall 1990).

However, Cohen and Aphek (1980) caution that association strategies may not benefit every type of learner, because they also found students who did not use association successfully. Their findings have been confirmed by Wang and Thomas's (1995) investigation of 64 English speaking undergraduates learning 30 Chinese characters by (1) keyword instruction and (2) rote learning with Chinese characters and English translations. Their results show that keyword imagination is not always more advantageous than rote learning, because the former has high probability of long term forgetting. In addition, the latter benefits automatic and spontaneous encodings. But many recent investigations have confirmed that the keyword method is not only helpful for adult learners but also for young ones (Li 1986; Elhelou 1994). Further, Gruneberg and Sykes' (1991) study of British university students' attitudes to learning Greek words by the keyword method, especially when creating a keyword relating to basic grammar, found students' positive evaluation of such links in terms of learning speed and enjoyment of learning.

Wang and Thomas (1995) argue that a majority of research studies confirm the benefits of the keyword strategies. They concluded with caution that firstly, teacher-supplied keywords in their study did not help students' retention; encouraging students' own efforts may reverse the results. Secondly, rote learning does not necessarily deserve a bad name: a lower level of word-handling strategy may be useful in learning a particular language like Chinese (see 2.6).

In weighing up pros and cons of these methods, the need to examine research studies at a deeper level emerges, rather than simply picking from the conclusions generated by particular experiments. Teachers seem not only unaware of the macro-level of vocabulary teaching methods, but they also ignore the micro-stages of how, for example, to employ contexts to achieve the purposes of lexical teaching and learning (see 3.5.3 for further discussion). Most importantly, students' beliefs and evaluations of different vocabulary learning strategies is worthwhile pondering (see next section).

Therefore, although it seems difficult to conclude which vocabulary learning strategies are best, there is a tendency that the more strategies are used, and the wider the range of strategies used, the better. Moreover, for helping production, it has been highly recommended that strategies should involve all four language skills. Teaching words obviously involves a wide range of skills, and each of the two dimensions of the teaching dynamics can be complementary to the other (see Chapter 2). Thus, it seems fair to say that there is no single supreme teaching strategy.

However, teaching vocabulary may be most effective when it facilitates learning dynamics (see Chapter 4). The following section proposes one learning process, which is thought to be generally applicable. It highlights learners' vocabulary learning processes, so that they can be incorporated into teaching processes.

3.4 Learners' vocabulary learning process: a 5R Model

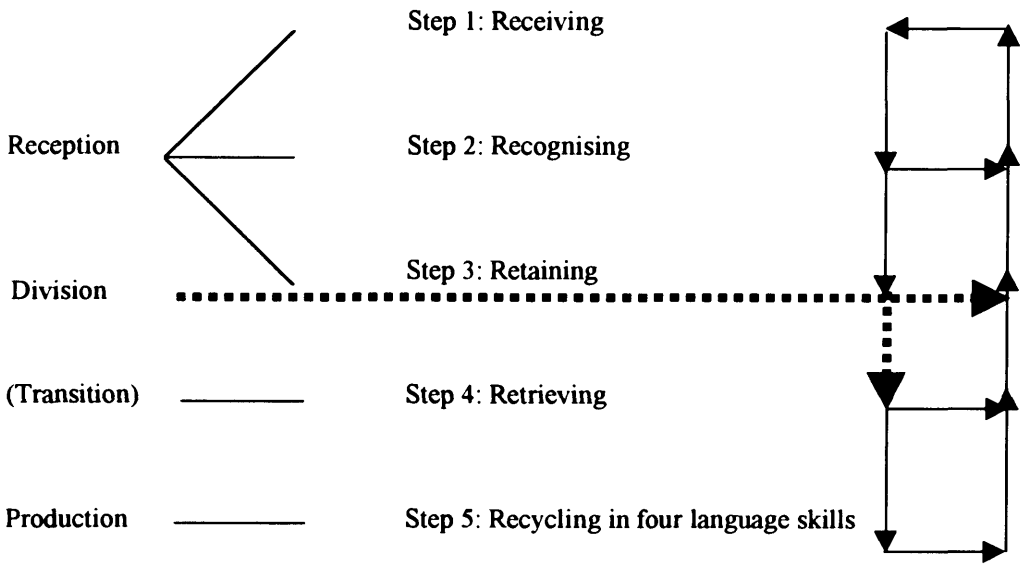
3.4.1 The dimensions and dynamics of a 5R model

Brown and Payne (in Hatch and Brown 1995) have proposed a five-step model for vocabulary learning: encountering new words, getting the word form, getting a clear image, learning the meaning of the words, and using the words. Renaming these steps, vocabulary learning strategies can be grouped into **5R** processes: **receiving**,

recognising, **retaining**, **retrieving**, and **recycling** in four language skills. The ideal teaching strategies may follow such dimensions and dynamics.

However, unlike the linear process proposed by Brown & Payne (ibid.), the **5R-model** is better seen as a dynamic circulatory system in which loops and sub-cycles are likely (see Figure 3.2). Thus this model is different from theirs, because as mentioned in Chapter 2 (cf. the roundabout-model), the ideal way of helping vocabulary learning involves a circulating process, allowing for retrogression from lapses in attention or memory under condition of stress. This is theoretically justified in neo-Vygotskian approaches to learning (Tharp and Gallimore 1988), which allow for recursive and retrogressive loops. Each of the steps may involve backward as well as forward loops. Most learners will progress forwards cumulatively in the long term and will therefore, compensate for retrogressive loops. However, Figure 3.2 shows the 5R model, as suggested here, is not a straightforward linear, step-by-step model.

Figure 3.2: Stages of vocabulary learning - a 5R model involving loops



For step 1 in Figure 3.2, learners have a number of choices for encountering new words. They may find out new words, either incidentally or intentionally, through the four main language skills, audio or visual materials, and from teachers, native speakers or other learners. It has been maintained that to achieve natural incidental acquisition, learners should use high contextualising resources. Hulstijn, Hollander, and Greidanus (1996) emphasise that in incidental learning students need to pay more attention because there are so many words that have to be learnt, so intentional word teaching/learning activities alone cannot meet the need.

After encountering and identifying new words, learners usually either consciously or subconsciously make efforts to recognise them, in step 2. Forms or meanings of the words are in general identified. Learners may use guessing or analyse the meanings of the words through any morphological elements that they have seen before, associate or create an image of the new words from sound or form. This may be a basic step for retaining and retrieving words from memory (Hatch and Brown 1995), which may connect to the storing in step 3. Apart from learners' mental efforts, they may also search for other aids, like using a dictionary, or ask others. However, if learners choose to neglect the new words, and if the new words are not met frequently, then the subsequent steps of vocabulary learning may not always take place, shown by a line between Steps 3 and 4. This line of active use can be used to divide learners' receptive and productive knowledge. However, such a division may not be always stable; some words can be learned from Step 1 and then the learner can jump to Step 5 directly (see Chapter 2).

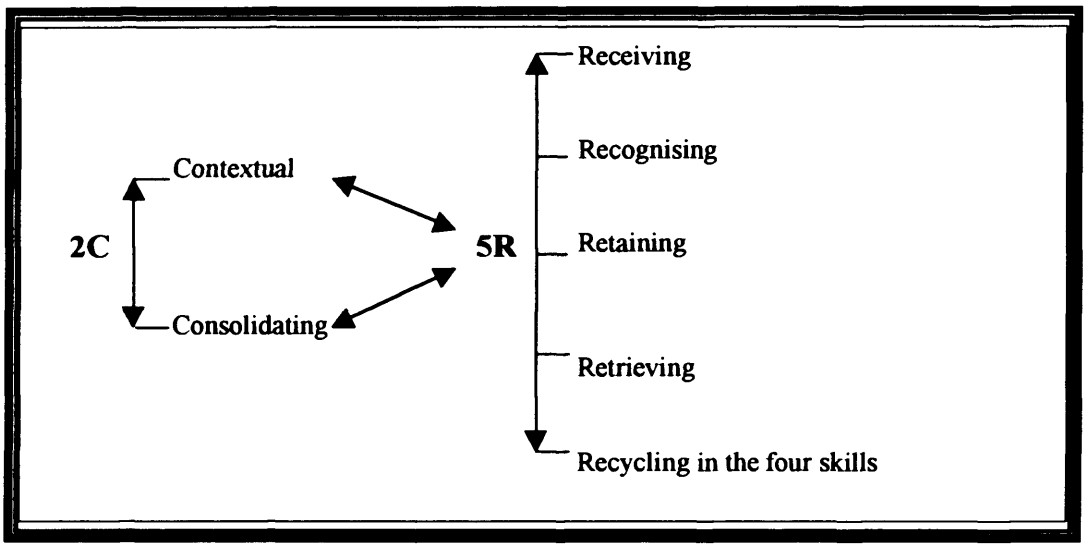
Although there is no intention to declare a stability of stage-transition in this study (cf. Meara 1989), the **5R model** seems to encapsulate the general dynamics that learners use to learn vocabulary. In this process model, techniques may be emphasised differently from step to step. Perhaps that is why it is not unusual to find that even highly advanced learners use de-contextualising methods, and why some research studies (e.g. Politzer and McGroarty 1985) concluded that there is no overall relationship between learning behaviours and the gains of the product. But

while teaching aims to process learners' acquisition, it needs to take account of the ways learners learn to help them to learn appropriately (see Chapter 4).

3.4.2 Reciprocal co-ordinate (2C-5R) model of vocabulary pedagogy

After discussing the two dynamics of teaching and learning methods, it seems appropriate to investigate these and to design a reciprocal co-ordinate model for classroom contexts (Figure 3.3).

Figure 3.3: Reciprocal co-ordinate model of vocabulary teaching and learning



The model portrayed in Figure 3.3 not only picks up on appropriate strategies to introduce words *per se*, but also considers whether such words are processed to follow learners' learning dynamics. Both vertical and horizontal directions need to be used reciprocally, co-ordinated in vocabulary pedagogy. Potentially, this Figure, together with Figures of Chapter 2 may be used as a framework of vocabulary pedagogy to draw teachers and learners' attention to learning processes. It incorporates current research findings and theories, and will be used as a foundation for this empirical study (see Chapter 5).

In summary, in this heyday of advocating the importance of vocabulary in L2 research and pedagogy, it is natural to expect that classroom practices have been updated, and are more theory-based. Nevertheless, much vocabulary teaching seems to be far from this ideal. Three aspects of the weaknesses regarding practical applications are discussed next.

3.5 Weaknesses of vocabulary teaching strategies in classrooms

3.5.1 Narrow dimensions of teaching strategies

Despite the argument that the best way of teaching vocabulary is to employ as many strategies as possible to cover the wide dimensions of learners' mental lexicon, it has been found that teachers tend to use a limited range of methods to teach vocabulary in many Asian ELT classrooms. Teachers tend to use decontextual methods to teach words which come from contexts, methods such as decoding the word meaning, or providing synonyms. Opportunities for word building exercises, and further discussion of the word meaning and usage in various contexts are rare (Larking and Jee 1997; Ooi and Kim-Seoh 1996).

In Chinese EFL contexts (as it seems from the major published resources from Taiwan and China), there has been awareness of the relative lack of proper instruction for learners. Many teachers have found that their Chinese students are normally aware that memorisation (frequently rote learning from the lists) can be an efficient way of learning words (Jiang and Jin 1991; Thorne and Thorne 1992). This may reflect how vocabulary teaching strategies have been inappropriate, and, as Yu (1992) criticises, this may: (1) lead to some negative learning consequences because students may learn limited or even false equivalents; (2) students may be unable to use collocations, or (3) obtain non-differential concepts, and (4) use uninteresting methods to learn. Many Chinese teachers urge that there should be a change of teaching vocabulary. This change should focus on extending perspectives on teaching and learning vocabulary, not only on meanings and equivalents, but on a more complete framework of vocabulary knowledge (Hong 1989; Hsieh 1996; Lin 1996; Liu 1992; Yue 1991). Unfortunately, innovation has to include not only

getting this framework right, but to reform misconceptions of several strategies; e.g. some Chinese teachers may misunderstand the function of reading strategies (Chia 1996). Some teachers may subjectively perceive that Chinese students "have a poor learning style" because of the common emphasis of memorising, grammar-focussed, or translation-based language learning strategies (Pause-Chang 1991: 734).

However, the weakness of applying a wide range of theoretically-based strategies to learn vocabulary may be more global: this is not only a Chinese EFL problem, but also a Western one, where the modern approaches originated. Through a qualitative study of teaching materials and transcriptions, Sanaoui (1996) found that in Vancouver it was difficult to differentiate planned or unplanned teaching in many French classes (see 3.2), because it was often the teachers who initiated or controlled the attention to words. Although many teachers may have been aware of the importance of vocabulary, the instruction was still partially meaning-focussed and tended to be incidental. This means that firstly, teachers tend to focus on semantic aspects of lexical items and their use in specific contexts, or review words. Other aspects of vocabulary (forms, social or discourse aspects) are less emphasised. Secondly, teachers tend to supply information for priority needs in the teaching process, to correct students' errors and check students' understanding. It remains a teacher-centred teaching style.

Overall, the practice of vocabulary pedagogy has long been criticised for over ten years for such flaws (e.g. Sinclair and Renouf 1988). Despite rich theoretical developments, little seems to be effectively applied by modern language teachers (Meara 1998; Oxford and Crookall 1990; Oxford and Scarcella 1994; Sanaoui 1996; Zimmerman 1997).

3.5.2 Constraints in classroom teaching

Teachers' narrow use of vocabulary teaching strategies may be because they believe that giving the meaning of words directly can be less time-consuming, or because of their familiarity with certain methods only. Moreover, it has been argued that

vocabulary teaching is least likely to be effective, because there is a belief that vocabulary is learnt in a very limited way in classrooms. Students, therefore, have a general feeling that they "were not taught enough words in class", but have to rely on themselves in the learning process by speaking, reading or watching TV (Morgan and Rinvolucri 1986).

There is then a strong argument, which Coe (1997: 47) makes, that "vocabulary must be learnt, not taught", as learning a word needs a long-term process of encountering it in many experiences. Coe (ibid.) questioned if there is much effect of teaching or giving more exercises to enrich students' knowledge of words: there are simply too many unknown words which are difficult to cover in class. Taking the problem of teaching collocations in classrooms as one example, Gough (1996) indicates:

> "One problem with collocation is that, although it is too important a subject to ignore, it is far too big a subject to teach *explicitly* in class - even if you taught only collocations and nothing else, what you could cover in a 100-hour course would be simply the tip of the iceberg. Another problem is that textbooks don't seem to take a very systematic approach to collocation - often exercises ask students to say which words can go with which, without giving them any data on which to base these judgements, making them more like tests than teaching activities" (p.32).

However, being aware of these difficulties is not a reason for abandoning the effort to raise learners' awareness of collocation and to teach them to notice it for themselves (e.g. Nation 1975). In some ways, there are always constraints to classroom teaching. The example cited above shows this complexity. Arguably, there is a need to be aware of vocabulary teaching and learning strategies, which is one of the main objects of this research study.

3.5.3 Lack of deep awareness of the research findings

Despite the fact that there are certain constraints in using particular strategies in classroom teaching, some strategies are said not to be used appropriately (Oxford and Crookall 1990). Moreover, what teachers consider useful strategies may only be

based on assumptions (Carter 1998; Tinkham 1993), rather than based on considering relevant theories and research findings.

Nevertheless, this is not without its reasons, as it may be that teachers are at loss and do not know on which research findings they should rely (Crookes 1998). For example, choosing between the extreme of whether to learn words from a list or from a context can be debatable (see 3.3). Stevick (1982) pointed out that learning from a word list is often disfavoured by teachers but students often do it. Nation (1990) comments that learning from a vocabulary list can be either good or bad, whereas learning through the contexts can be time-consuming. Carter (1998) is unsure of the benefits of learning from the context alone, and believes that a mixture of different methods can be better. These three authoritative opinions illuminate the dilemma of applying particular teaching and learning vocabulary strategies directly from the research findings without analysing their efficiency for different aspects of vocabulary learning in detail (see 3.3). Researchers, like Cohen (1987a), have been aware that conclusions drawn from laboratory findings can be qualitatively different from classroom teaching and learning. So any application has to be carefully considered.

On the other hand, another possible reason that teachers do not apparently handle vocabulary teaching well is that they are burdened with overwhelming information derived from research studies (see Mobarg 1997). Nation's (1982) advice about the dilemma of interpreting research findings into pedagogy remains valid a decade later (Nation's 1997). Findings derived from research studies can contradict each other, and if teachers do not synthesise and analyse the research findings carefully, it is likely that applications may be "mishandled, or avoided almost entirely" (Oxford and Crookall 1990: 9). A cautionary example is the effect of learning words through their semantic sets. Despite the popular application in current coursebooks, Tinkham (1993) and Waring (1997) warn that there is a danger of causing difficulties due to interference of conceptual similarities.

To a certain extent, teachers seem to be 'consumers' of research, who take away the 'products' (results) rather than focussing on the 'ingredients' (premises) and processes (Widdowson 1990). Therefore, as consumers, they may either like a certain product and stick to using it, or dislike the product and discard it. For example, it is likely that when teachers notice that using the context is useful to teach vocabulary, they may collect as many authentic materials as possible, and suppose that their students may profit from contextual materials *per se*. But what 'context' is and how 'authentic' it is has been debated (e.g. Nation 1997), and its 'usefulness' has constraints (see 3.3.1).

Furthermore, some 'take-away' approaches (including techniques) seem to be easily over-simplified, and superficially understood. This problem has existed since the development of CLT (e.g. Byram 1988; Li 1998). Lewis (1993) expresses a strong viewpoint on a demand for language teacher development:

> "Language teaching sometimes claims to be a profession...its practitioners cannot simply rely on recipes and techniques; they need an explicit theoretical basis for their classroom procedures...too few language teachers exhibit the kind of intellectual curiosity and readiness to change which is normally associated with professional status. Linguistics and methodology are both comparatively new disciplines and major developments have occurred in recent years. It is disappointing that so few teachers are anxious to inform themselves about such changes, and incorporate the insights into their teaching; it is more disappointing that many teachers are actively hostile to anything which, for example, challenges the central role of grammatical explanation, grammatical practice and correction,..." (pp. viii-ix).

This situation is critical, given that Chinese teachers of English are not sufficiently well-trained, so that sticking to old, familiar, and traditional methods is not uncommon (Kohn 1992). Moreover, in most contexts involving Chinese teachers of English (with possible exceptions in Singapore or Hong Kong), the teachers have not, in general, received sufficient training to be able to read research articles. While undergraduate courses preparing English language teachers focus quite substantially on acquisition of new vocabulary, the student teachers are rarely given access to the research basis for the methods advocated by the teachers. Also, while such intending

teachers engage in extensive reading in English, such reading rarely includes research articles. In short, teachers have little access to relevant research. Chinese scholars and teacher educators who might be in a position to convey current research insights to students and classroom teachers rarely write about research issues for such audiences. In making this critical point, it should be borne in mind that the academic resources of research journals, professional journals or research-based books are less widely available to Chinese teachers. This is particularly true in Mainland China and still largely the case in Taiwan. Many teachers do not have easy access to libraries with research articles (in English).

Many L2 teachers seem to lose sight of the underlying value of using contexts, and seem unaware of the complexity of psychological processes involved in learning word meanings in contexts (Van Parreren and Schouten-van Parreren 1981). Many teachers aim to create an interactive environment, however often such activities seem to be lexically mishandled in class, and tend to be only partially understood as one of the better ways to enhance vocabulary acquisition. Ellis, Tanaka, and Yamazaki (1994), for example, investigated the effects of listening input. Their study indicates that interaction (especially interactionally modified input) enhances vocabulary acquisition by arousing students' awareness of the word, and comprehension of its meaning. But interaction may not be the only way to promote "other aspects of vocabulary acquisition" (p. 482), as "[l]earners who do not have opportunities to interact in the L2 may be able to compensate by utilizing alternative learning strategies" (p. 479). Teachers need not worry too much if some students in the classroom are quiet and do not seem actively involved, provided they are listening to the input.

Further, some authentic texts may be unsuitable for particular learners' if there are too many unknown words which frustrate learning (Dubin 1989). The control of the unknown words seems to be important for comprehension, and reading texts below a ceiling of 5% of unknown lexical coverage may enhance comprehension (Laufer 1989). So learning vocabulary through authentic contexts can be well motivated to

provide better effect on guessing for vocabulary acquisition (Hirsh and Nation 1992; Hwang and Nation 1989; Liu and Nation 1985). Ellis (1995) has shown the importance of appropriate modification of oral input for better comprehension and acquisition. He suggests that encouraging interaction before learners comprehend the new word does not necessarily produce the beneficial effects which teachers may assume, however communicative it may look. Furthermore, teachers seem to heed the general principle, rather than specific application. For example, Hulstijn (1992) points out that to judge whether to guess the meaning in teaching vocabulary is better, is not as important an issue as to discuss which types of cues are better.

Therefore, whatever research has shown, it could be dangerous if teachers only know the superficial results. The clear message is that teachers should be aware that it is not sufficient to use the materials or methods which are considered communicatively authentic, or play audio cassettes, and arrange group discussion, and then assume that the teaching was successful. Teachers need to know how to modify the materials and how to attract students' attention or involve them in oral interaction. Students' motivation and interest for different tasks can vary in different classrooms. Therefore, it is also important to ascertain students' feedback about different vocabulary teaching strategies. In addition, students need to be trained in both contextual and decontextual learning with strategic guidelines (Bensoussan 1992; Dubin 1989; Clarke and Nation 1980; Schouten-van Parreren 1989, 1992; Palmberg 1987a, b; Qian 1996; Van Parreren and Schouten-van Parreren 1981). As Nation (1982: 23) argues:

> "every attempt must be made to ensure that the learning is being carried out in a way that makes use of the context, otherwise words in context could be learnt as if they were in lists."

He believes that contextual and decontextual learning compensate rather than compete with each other:

> "Learners should be given guidance and practice in the techniques of guessing from the context because this will be valuable both in learning new words and in establishing words already studied in lists" (ibid.: 28).

3.6 Conclusion

This chapter has argued that vocabulary teaching (or learning strategies) need to cover a wide range, as de-contextual or contextual methods draw on different dimensions of vocabulary knowledge. Moreover, the use of strategies may need to circulate in a dynamic system, as stages of learning are not likely to be linear.

Overall, vocabulary teaching strategies are not 'good 'or 'bad' *per se*. They may in themselves have neither positive nor negative sides; no single method can really achieve the purpose of vocabulary acquisition (Schmitt 2000). As Pincas (1996) criticises:

> "Too often we talk as if there could be *one* method of learning and teaching language. But there are different kinds of learning involved for different aspects, ...there would seem to be different strategies appropriate for different competencies..." (p. 16)

Increasingly, teachers have become aware of the importance of vocabulary teaching. Potentially this might mean that if teachers introduce a broad range of methods discussed in this chapter, learners may correspondingly use a broad range of strategies. However, apparently classroom methods are still very restricted. This chapter has indicated three aspects concerning the weakness of vocabulary teaching in classrooms. In teachers' defence, it can be observed that many teachers are too busy, or concerned with too many aspects of language teaching to be aware of recent research in detail.

Although this argument does not mean to undermine teachers' ability, it is necessary to transform teachers' and learners' common beliefs about how best to teach and to learn vocabulary, so that they are more able to analyse which strategies are useful for which aspects of vocabulary learning. In recent claims, examining frameworks of vocabulary knowledge can be helpful for understanding what types of activities are best suited for enhancing which types of vocabulary knowledge (Schmitt 1995), and this study has clearly pictured such frameworks by looking at the structure of vocabulary (Figure 2.1), stages of vocabulary learning (Figure 3.2), and an overview

of vocabulary teaching and learning (Figure 3.3). However, no matter how effective teaching strategies may be, there are too many words to focus on in class. Therefore, some pedagogues doubt that teaching vocabulary has great influence on language learning (Coe 1997; Morgan and Rinvolucri 1986). Recognising the evidence showing that teaching can broaden learners' knowledge of words (Ellis *et al* 1994; Zimmerman 1997), it is important to focus on learners' learning techniques or strategies which may help them to "comprehend, learn, or retain new information" (O'Malley and Chamot 1990: 1). Perhaps the most important thing for teaching vocabulary is not to judge which single strategy will be the best for students, but to inform or train learners about sensible use of a variety of different strategies. This would allow for a range of individual approaches to learning but also hope to expand the range of strategies available to students.

Thus, effective teaching may be based more on the development of skills and practices than on knowledge and content (Bialystok 1985), and help students towards metacognitive awareness of strategy choices. As Sternberg (1987) maintains, a main function of teaching vocabulary should be to teach students to teach themselves. He said:

> "No matter how many words we teach them directly, those words will constitute only a small fraction of the words they will need to know, or that they eventually will require. They truly constitute a drop in the vocabulary bucket. It doesn't really matter a whole lot how many of those few words students learn, or how well they learn them. What matters is how well they will go on learning long after they have exited from our lives, as we have exited from theirs'. (p. 97).

Morgan and Rinvolucri (1986) found out that learners in interviews claimed they used many techniques that are not very commonly used in classrooms. They concluded that learners "recognized something that their teachers did not: for learning to be effective, attention must be paid to the student's own process of learning", and effective teaching is to "work with that process" (p. 5).

Therefore, introducing vocabulary learning strategies may make a difference when students can be taught properly to use strategies themselves outside classrooms. As Hatch and Brown (1995: 419) indicate,

> "the overall choice of approach may be less significant in what is learned or how fast it is learned as are the many small choices of details within the overall approach".

They conclude:

> "The effectiveness of these strategies for individual teachers and learners depends on many factors, and language educators must approach decisions about methods and materials systematically, using principles to help us make wise decisions" (ibid.: p. 422).

There is therefore a need to look at students' own learning, so that more effective help can be given in classrooms. In order to achieve this goal, it is necessary to research students' vocabulary learning strategies. The next chapter reviews different research findings of how students learn, and how much they know about their learning from a cultural perspective. As argued, this is relevant for vocabulary instruction.

CHAPTER 4

LEARNERS' CULTURAL BELIEFS ABOUT VOCABULARY LEARNING STRATEGIES

4.0 Introduction

Chapter 3 reviewed some strategies which are useful for enlarging and deepening the dimensions of learners' mental lexicon. However, few of the general studies of learners' strategies have shown how students really learn an L2 vocabulary in detail, let alone how students' evaluate their own learning. It was concluded that teaching vocabulary should focus not only on students' knowledge of lexical items but on their vocabulary learning strategies. This has the twofold advantage of giving students access to a range of strategies for learning items introduced in class and of helping students towards more independent control of their own vocabulary learning, both in and out of the classroom.

This chapter starts from a discussion of the importance of learner-centredness in L2 learning. It then focuses on how learners are aware of their own learning and how their L1 language and culture may affect that learning. A further focus will be on Chinese cultural approaches to learning English compared to those of British learning Chinese and French.

4.1 Learner-centred language pedagogy and learners' strategies

Supported by an increasing body of research investigations on L2 learning strategies, L2 teaching seems to have reached a high point of proclaiming that learners have to be trained how to learn, and be responsible for their own learning (Cotterall 1995; McDevitt 1997; McDonough 1995, 1999; Nunan 1997; O'Malley and Chamot 1990; Oxford 1989; Oxford 1990; Oxford, Lavine, and Crookall 1989; Pearson 1988; Reid 1995; Rubin and Thompson 1994; Wenden and Rubin 1987). That is, among recent pedagogical claims, especially those arising from research into learners' learning styles and strategies, the most important recommendation is to

train students to be autonomous in pursuing the goal of linguistic, communicative, and strategic competence according to individual needs.

Further, there are calls for learners to be 'researchers', as a great demand arising from the study of learners' strategies is to ask learners to pay attention to, report or evaluate their own learning process (e.g. Cohen 1987a). Some researchers claim learners are 'managers' who govern their own learning (Holec 1987). Such calls emphasise the importance of the status of learners in learner-centred classrooms (Nunan 1988, 1992a, 1993; Oxford 1996a; Tudor 1996). Textbooks and teachers, therefore, no longer play such dominant roles in teaching pedagogy. Rather, it is held that teaching methods would be more effective if they fit learners' variables (Oxford, Hollaway and Horton-Murillo 1992). Such learner variables will include their vocabulary learning strategies.

Some empirical research on learners' strategies has found that learners' own control and awareness of their learning may make a difference to acquisition: consciousness-raising may be a starting point to alter their beliefs about the learning methods they employ or not (O'Malley and Chamot 1990; Oxford 1990; Wenden and Rubin 1987). This emphasis has been established since the classic interest in the 'good language learners' (Rubin 1975; Stern 1975), who employ more strategies than 'bad' learners.

Although there have been caveats about interpreting the correlation between proficiency and use of strategies concerning cause or outcome (Bremner 1997, 1998; Rees-Miller 1993), there is broad consensus that there are associations between using strategies and facilitating acquisition. Therefore, it is advocated that a sound teaching strategy is to raise learners' consciousness of being 'good' learners and to select appropriate language learning styles (Ellis 1989; Melton 1990).

Concerning vocabulary development and L2 learning strategies, several macro level methods of vocabulary learning have been identified, such as the use of dictionaries,

memorisation, practice, contextualisation, repetition, and the active use of target words (O'Malley and Chamot 1990; Oxford 1990; Wenden and Rubin 1987). Although the importance of specific vocabulary learning in studies of language learning strategies has not been neglected, limited attention has been paid to the details of its development (see Chapter 1). For example, in Oxford's (1990) strategies inventory, version 5.1, twelve items out of fifty in the beginning of this questionnaire clearly specify ways of learning words. They are, in fact, methods for remembering words. Other items concerning other aspects of vocabulary learning are integrated here and there within the general language learning framework. This seems to show that whenever terms for memorising strategies are included, vocabulary is thought of as independent learning.

But wherever other types of strategies are the focus, learning vocabulary seems to become dependent and discrete. As O'Malley (1987) indicates, vocabulary has a tricky status within studies of learners' strategies because vocabulary learning is treated as a discrete skill, on the one hand, yet on the other hand learning vocabulary is not like putting separate pieces of a jigsaw together (see Chapter 2).

In the development of L2 vocabulary acquisition, there seems to be an increasing response to a truism which has appeared in L2 learning strategy research in recent years, that teachers (and learners) should pay attention to learners' own learning processes. Carter and McCarthy (1988a: 11) confirm: "how words are taught has to take into account what we know about how words are learned". Further, Carter (1998) argues that the more teachers know how learners learn L2 vocabulary, the more effective that teaching will become. He concludes that "unless satisfactory answers are obtained to the question of just what it is that learners learn when they acquire new words in another language, then teaching procedures will be to some extent a hit-and-miss affair" (ibid.: 198). Such comments highlight the importance of focusing on learners in vocabulary teaching.

However, there is apparently little research which systematically recommends ways to train students (Cotterall 1995). In particular, there is little to help teachers to handle the specific cross-cultural dynamics of vocabulary learning. The present study is a starting point to investigate relevant similarities and differences of learners' vocabulary learning strategies regarding English, Chinese and French. Despite general principles of enhancing vocabulary acquisition (see Chapter 3), there is a special need to focus on the cultural differences. The following sections highlight differences between Chinese and English learning cultures.

4.2 Recent research studies on learners' vocabulary learning strategies

Exploring student's beliefs of learning L2 vocabulary includes two general aspects. One is 'bottom-up': learning vocabulary is like building up bricks of the language. It tends to be an independent task of learning individual words and phrases and gradually synthesising a broader picture of the target language. This is seen in one of the Korean subjects studied by Wenden (1986a, 1986b), who believed that vocabulary can be learned piece by piece. The other aspect is 'top-down': vocabulary is learnt through learning whole structures of the language, so that undivided lexical items are seen within the larger framework from the beginning. This is a more dependent task as teachers guide the analysis.

Chapter 3 introduced a strategic model: **2C-5R**. This model illustrates that on the one hand, teachers and learners have to employ methods that are helpful for encountering new words. On the other hand, learners have to use strategies to help to remember the words so that comprehension and production can be facilitated. The following summarises some research investigations, mainly by using students' own self-reports, which show general support for this **2C-5R model**.

Pickard's two studies of German university students (1995; 1996) showed that the students particularly emphasised strategies relating to reading and listening, like reading newspapers and listening to the radio. Interestingly, the study drew attention

to students' own out-of-class use of learning strategies, which may not have been taught in class. However, Pickard only focussed on students' preferred strategy choices and did not pay attention to their evaluations of these strategies.

Based on the qualitative investigation of his own diary as a British learner, who was learning a unique European language (Hungarian) with few cognates and borrowings, Jones (1995a) used two types of vocabulary strategies for expanding words. These are *studio* strategies (learning about phrases, grammar, using coursebooks, checking etymological sources, active memorisation, real texts, and using words) which need to be interwoven with real *output-practice* strategies (translating, writing, conversation, reading texts) which may be useful for individual learners in any stage of learning.

In addition to interviewing learners or analysing student questionnaires, some researchers have observed students' methods when tasks were involved in class. Ahmed (1989) identified the micro-strategies used by 300 Sudanese learners of English, and assessed how frequently the strategies were employed. Using questionnaires, interviews, a think-aloud task, and observation, subjects were classified into four groups according to educational background, and two broad categories for good and underachieving learners. The result implied that the better the learners, the wider the range of the vocabulary learning strategies they used. Although the levels of Chinese learners of English sampled in this present study will not be distinguished, Ahmed's (ibid.) study supports the **2C-5R model** which sketches the ideal range of vocabulary learning strategies to help learners towards more successful vocabulary acquisition.

Sanaoui (1995) used qualitative research methods to investigate 50 ESL adult students' approaches to learning L2 vocabulary. This exploratory study was followed by case studies of 4 students of English and 8 students of French. Two different types of vocabulary learning approaches: structured and unstructured. The former is more student-centred, systematic, and extensive in vocabulary learning compared to

the latter approach. The dividing line between the two approaches is based on five contraries: opportunities for learning vocabulary, a range of self-initiated activities, the recording of lexical items, review of lexical items, and practice of lexical items. Further, these case studies confirmed uses of a list of mnemonic procedures, which include writing, immediate repetition, spaced repetition, using the lexical item, contextual association, linguistic association, imaginary, and talking about the lexical item with someone.

Not only focusing on students' use of vocabulary learning strategies, but also on their evaluation of the efficiency of the methods frequently or rarely employed, Cortazzi and Jin (1994; 1996a) analysed over 200 university students' questionnaires together with a number of in-depth interviews of Chinese learners of English. The subjects were asked to respond to 24 items which were developed in an extensive pilot study with students' answers to the general question "*How do you learn vocabulary?*". Both found that reading textbooks, listening to audio cassettes and radio programmes, memorising words in vocabulary books and teachers are the major methods used, and are rarely changed even in university level. Unexpectedly, students express doubts about the efficiency of the commonest methods they employed. The subjects' beliefs about certain strategies seems fixed, and there is a need to broaden their methods and evaluate the advantages or disadvantages of the methods.

Such findings parallel the survey study by Schmitt (1997) of 600 Japanese secondary and university students and working class adult learners. His questionnaire consists of 58 strategic items, which were finalised from a survey of the coursebooks and from students' and teachers' beliefs. The 58 items were classified into 5 groups: social, memory, cognitive, metacognitive, and determination strategies. Further, these 5 groups were then classified under the two general categories of strategies for the discovery of a new word's meaning and strategies for consolidating a word once it has been encountered. These categories might be termed **2C** as discussed in Chapter 3.

Overall, Schmitt (1997), along with Cortazzi and Jin (1996a), found that vocabulary learning strategies were expanded over the time due to learners' age or increasing proficiency, and more strategic items were believed to be useful. These two findings imply that applying a wider use of strategies may be helpful for early stages of learning. Instruction about how to learn is also necessary because when learners believe more strategies can be useful but do not actually use them, appropriate information may prevent learners from fossilising stereotypes or misconceptions about some methods. This again supports the framework of 2C-5R model in L2 vocabulary pedagogy, which is not only used for learning word knowledge, but for learning how to learn.

Although the 2C-5R model may be helpful to generalise about learners' purposes of vocabulary learning methods, it is unclear how the micro strategies may be employed and emphasised by different groups of learners, especially when they are from different cultural backgrounds (see 4.3). An interesting point that Cortazzi and Jin (1996a) found is that the frequency in many of the strategies remain consistently high or low in use. Some strategies, although they can be different in different stages of learning, can also be quite stable. This may show a cultural influence regarding learning.

Moreover, Schmitt's (1997) large-scale survey found that some strategies used by Japanese students obviously contradict the promotion of CLT. Further, Japanese students perceived vocabulary learning as a more individual task, which may not be helped by group work. Group work, therefore, was not favoured by his subjects. In addition, word analysis, which may be thought an old-fashioned and decontextualised method by CLT teachers, was actually evaluated favourably. Schmitt (1997) interprets the result from his survey with caution: results may be different from those of other learners of different linguistic or cultural backgrounds.

4.3 Culture, language learning styles, and language learning strategies

4.3.1 Culture background and learning styles

It may be argued that 'style' and 'culture' are two distinct but complementary concepts, because the former reflects individual personality differences, but the latter implies norms or customs shared by a group of similar individuals (Nelson 1995). There is some consensus of definition of learning styles as cognitive, affective, and psychological traits which affects students' preferred or habitual patterns of mental functioning and the ways they perceive, memorise, and process new information (Ehrman and Oxford 1990: 311; Scarcella 1990: 114). However, at the level of cultural community, culture must play an important role in influencing learners' learning patterns, so that participants from different cultures have different expectations and values regarding learning. Although culture is shared, it also can be learned. Learning and associated behaviours, concepts and values about how to learn are, in fact, key elements in any culture. That is, through the process of socialisation, students directly or indirectly learn 'how to learn' in order to be part of a particular culture.

Therefore, learning styles are believed to be influenced by culture, because culture itself is often generalised as representative of beliefs, values, and behaviours (Oxford and Anderson 1995; Oxford, Hollaway and Murillo 1992; Reid 1995; Scarcella and Oxford 1992; Sternberg 1995; Young 1987). An important implication is that this will include cultural beliefs and values about learning itself. In educational contexts, a 'cultural theory of learning' (Singleton 1991) or simply 'culture of learning' (Cortazzi and Jin 1996a, b, c; Jin and Cortazzi 1998a, b; Cortazzi and Jin 1999) has been addressed.

A culture of learning, as Cortazzi and Jin (ibid.) define it, refers to the system of expectations and interpretations about learning which partly derive from educational traditions and cultural practices which affect the roles played by teachers and learners, beliefs about teaching and learning, and how teaching and learning take

place in classrooms. Within any particular cultural group, this system is often taken for granted. But when participants come from two different cultures of learning, the effect of teaching and learning may be impeded by participants' different evaluations of each other's classroom practices and beliefs.

Language learning styles, although originating from or being applied to different types of learning, can generate specific learning strategies employed by learners which are supposed to be appropriate in response to different tasks. The subtle difference between 'language learning styles' and 'language learning strategies' is that the former refers to more general approaches, but the latter will be more specific and conscious techniques that students use to improve their internalising, storing, retrieving and use of the target language (Oxford and Anderson 1995; Oxford, Hollaway and Horton-Murillo 1992). Either can be seen to differ at the cultural level.

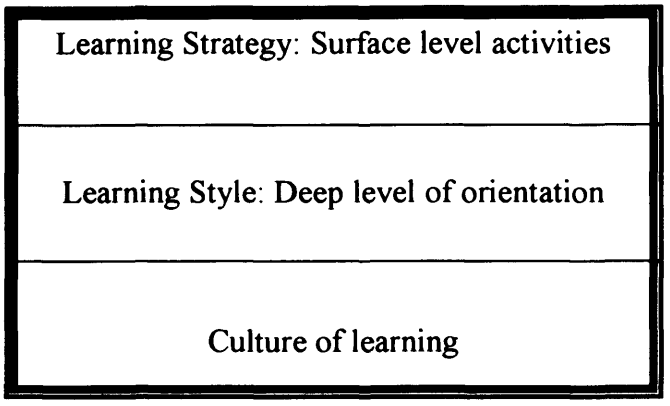
This study consistently refers to 'strategy' as the nature of vocabulary learning activities and tasks, whereas 'styles' may be referred to as a more stable or traditional beliefs. 'Strategy' is at the more 'surface' level which may be influenced by the 'style' underneath. This study intends to focus directly on the more concrete surface level that learners are aware of, i.e. the nameable skills and activities that they use to help them to learn L2 vocabulary. In this case, 'style' and 'strategy' have a hierarchical relationship in this study. As Reid (1987) suggests,

> "educators can assume that learning styles are adaptable, that learning style preferences can be identified and modified, and that unconscious or subconscious learning styles can become conscious learning strategies, ..." (p. 101)

Figure 4.1 shows that learning strategies are relatively observable, and are probably within learners' awareness, and so can be considered surface level activities. Learning styles, however, are less observable, and learners are quite likely to be less explicitly aware of them, so they may be considered to be at a 'deeper' level, like cultures of learning. While 'style' is arguably held to be individual and related to personality, it is likely to be influenced by cultural contexts; 'strategy' may be shared

but equally (or to a greater extent) influenced by culture. This aspect is discussed below.

Figure 4.1: Hierarchical relationship of learning style, learning strategy and culture of learning: an iceberg structure



4.3.2 Cultural learning styles and strategies

Recently attention has been paid to finding out how strategies are similar or different. Oxford and Anderson (1995) point out the great significance of a cross-cultural understanding of language learning styles, because this relates to success in second or foreign language teaching and learning.

Researchers who are aware of this importance of cross-cultural understanding, have conducted research in the field of English language learning in an effort to trace different learning styles back to different cultural backgrounds, or to different types of culture. Here the summary is focused on comparative results of research on native English (mostly American) and Chinese learners (both from Taiwan and Mainland China). Several dimensions of language learning styles have been identified in several L2 learning contexts and from different ethnic groups of learners.[12] For example, Chinese may be more obviously visual, reflective, closure-oriented, and introverted, whereas, English-speakers tend to show the opposite (Nelson 1995;

[12] The most discussed dimensions relating to Chinese and English speakers are found in the following contrasting styles: global vs. analytic, field dependence vs. field independence, inpulsivity vs. reflection, closure-oriented vs. open-oriented, extroverted vs. introverted, and visual vs. auditory vs. hand-on. In some areas, it may be more consistent to show group differences between Chinese and English (see Reid 1987, 1995 for an explanation of these terms).

Reid 1987; Oxford and Anderson 1995; Oxford, Hollaway and Horton-Murillo 1992; Scarcella 1990).

However, some caveats need to be stated. Such classifications can never be precise and determinant (see Oxford and Anderson 1995). It does not mean that English and Chinese share no similar grounds at all (e.g. they may both tend to be global-style learners). Nor does it mean that there are no individual differences within the same cultural group. Chinese groups, for example, exhibit both field dependence and independence and have multiple major learning styles (Reid 1987; Melton 1990). Such a style-mixture syndrome is what Oxford and Anderson (1995) diagnosed as flexibility in cognitive style. Nevertheless, such comparisons still show cultural differences. That is, comparing English (American) and Chinese learners seems to reveal differences of emphasis in the use of learning strategies. It is unlikely that one group will exclusively or predominately use a strategy while the other group never uses that strategy at all. Rather, it is more likely that both groups employ both strategies, but differently, one group may put more emphasis on the strategy which the other group does not emphasise much. Such trends are always likely to include individual differences.

Such a tendency among cross-cultural learning styles may also extend to the beliefs of 'appropriateness' of language learning strategies; students might show cross-cultural preferences if 'style' and 'strategies' are generally compatible (Oxford and Anderson 1995). Some exploratory studies in English in an L2 context tentatively indicate culturally loaded learning strategies (Politzer and McGroarty 1985; Thompson 1987b: 49; Wenden 1987: 29, 113; Skehan 1989: 85; Oxford 1990: 200). This is because the underlying methods used by different ethnic groups were different (see, e.g. Bedell and Oxford 1996). Politzer and McGroarty (1985) explored the self-reports of 37 pre-university students in the USA regarding strategy use in the development of linguistic and communicative competence. Although their intention was not to investigate factors influencing learners' vocabulary learning preferences *per se*, they found that Western language learners (e.g. Hispanic

groups), showed preference for using communicative strategies. By contrast, Oriental students did much rote learning, and used less of the various so-called 'good' language learning strategies based on a Western sense of language pedagogy. These labels ('Western', 'Oriental') need to be treated with caution, but the general contrast is clear.

Similarly, in an experiment on the effects of vocabulary learning training, O'Malley (1987) found that different ethnic groups of learners (i.e. Hispanic and Asian students) have different customary strategies which lead to different degrees of efficiency of vocabulary learning. The students from Asia used rote repetition, and training did not change this learning habit (which is not to say that they could not change).

Moreover, in analysing Chinese students' habits of English reading, Tsai (1997) found that reading is not considered enjoyable when the number of new words slows down the reading speed because they feel the need to check the meaning of each one. Chinese students seem to be nervous when encountering unknown words (Ping 1995). By contrast, in Pickard's study (1996), German speakers of English emphasised that their reading is for leisure purposes; they prefer to guess meanings of words from the context, and only look up words occasionally if unknown words may cause a barrier to understand whole sentences. However, this does not mean that when Westerners are involved in L2 reading, they do not need any explanation or short definitions of new words. Jacobs *et al.* (1994) found that adult English learners of Spanish have a preference for glosses written in the margin, and use Spanish glosses if they are available. Nevertheless, this preference only seems to be efficient for reading comprehension, not for recall of new lexical items.

Exploring learners' cultural beliefs of learning an L2 is important, since the results may yield information for effective teaching (Abraham and Vann 1987; Horwitz 1987; Wenden 1987; Yang 1994). Ellis (1989) found different learning styles in classrooms, and that learners can do better if their learning style matches the

instructional style, or if they can be flexible in adjusting to a new one. As he stated, "learners do benefit if the instruction suits their learning style, but, if it does not, they may be able to adapt, at some cost to their own ease of mind and the type of proficiency they develop" (p. 259). Stevick (1982: 34) also indicated that because of individual differences of L1 learning styles, if a particular teaching activity does not start from a learner's strength, security and confidence, then the effects of learning a new language are questionable. Oxford (1989) maintained that there will be a better effect on the formulation of learners' strategies if they are taught under the guise of old, familiar ones, relating to their cultural background.

There are numerous examples of the mismatch between teaching and learning styles or strategies (Cheng 1996; Holliday 1994). In particular, gaps have been found in cross-cultural teaching and learning contexts (McCargar 1993). In her own experiences as an American learning Chinese, Bell (1993, 1995) felt frustrated and discouraged when she discovered how much her assumptions of learning Chinese literacy were different from those of her Chinese teacher. Different learning styles were particularly found when learning writing, in which it was almost impossible for her to transfer her L1 learning experiences. In her experience, writing words neatly, using definite strokes in a required order, with particular breathing patterns were not demanded in English or in learning European languages, as long as words can be recognised; writing was not trying to imitate a model repeatedly without taking care of meanings. Yet she found these aspects to be heavily emphasised in her learning of Chinese.

Such examples imply that the distinction between 'good' or 'bad' language learning strategies has less validity, although it provides some useful guidelines for better language teaching and learning (Naiman *et al.* 1996; Rubin 1975; Stern 1975). The division between 'good' and 'bad' strategies may be unclear (Abraham and Vann 1987; Porte 1988; Vann and Abraham 1990), especially cross-culturally. Further, there is an argument that judgements regarding 'good' or 'bad' learning strategies should not be too fixed, because students' learning behaviour and learning outcomes

may be debatable on a cause-effect issue especially if they are shown to be influenced by culture (Bremner 1997, 1998; Goh and Kwah 1997; Politzer and McGroarty 1985).

Discussions so far have shown support for cross-cultural studies of learning, which need to be built in the framework of modern language pedagogy. Contrastive analysis in two academic cultures (i.e. Chinese and British in this study) with regard to specific language learning contexts may minimise some frictions or breakdowns (however indirectly) in teaching and learning processes (Scollon 1999). The following section focuses on the analysis of the cultures of learning of English and Chinese.[13]

4.4 Contrastive models of the culture of English language teaching and learning: English vs. Chinese Culture

4.4.1 Cultures of language learning for ELT

After the impact of CLT from the late 70's, Western scholars or teachers have been focusing on the development of language skills to achieve communicative competence and language acquisition (e.g. Brumfit 1984; Brumfit and Johnson 1979). Such communicative methods arguably reflect elements of Western cultures of teaching and learning an L2, particularly, as Holliday (1994) claims, in the private language school sector. Beliefs in the desirability of providing natural environments, using pair and groupwork, simulation, and even devising communicative tasks in teaching plans or syllabus are widely held (e.g. Cajkler and Addelman 1992; Krashen and Terrell 1988; Nunan 1989). In this climate, specifically in British modern language teaching contexts, attention is also strongly focussed on learners' strategic training (Cajkler and Thornton 1999; Grenfell and Harris 1993, 1998; Heafford 1990). An example of teachers' beliefs of the value of activities is shown in Table 4.1.

[13] See Section 1.8 (2) – (5) for the clarifications.

Table 4.1: Three rankings of values of activities by teachers

PUPIL ACTIVITIES OF LOW VALUE	PUPIL ACTIVITIES OF MIXED VALUE	PUPIL ACTIVITIES OF HIGH VALUE
Choral/individual repetition. Reading aloud from the textbook. Reading out dialogues/role-plays. Translating. Copying from board/book. Drawing/colouring in. Word-searches.	1. Doing drill-like activities. 2. Pupil-pupil dialogue. 3. Receiving grammatical explanations.	1. Listening to the target language. 2. Replying to questions in the FL. 3. Asking questions in the FL. 4. Engaging in dramatic activities. 5. Increasing active passive vocabulary. 6. Reading silently. 7. Relating language to social/cultural context. 8. Doing written work of an error-avoiding nature.

(Source: Heafford 1990: 88)

Language learners are encouraged to initiate conversation in classrooms, and actively undertake tasks. Textbooks or coursebooks for learning English have also responded to such developments. Recent international textbooks are full of pictures (mostly colourful), activities, dialogues, and audio-oral practices. Tasks, information-gap fillings, situations, functions, problem-solving are important in the typical design for modern pedagogical requirements (Nunan 1995b; Swan and Walter 1985; Willis and Willis 1988). Nunan's (1995b) coursebooks, in particular, have explicitly interwoven strategy-training as part of learning language content. Arguably, such an English-speaking culture of language learning is not only revealed in materials for Teaching English as Second/Foreign Language (TESL/TEFL), but for other European languages such as French (McNab and Crossland 1993; Noel and Davies 1999; Taylor and Edwards 1992) (See 4.4.2.3).

4.4.2 Chinese culture of language learning

Under the impact of ELT developments from Western countries, Chinese teachers are under pressure to modernise, but some immediate difficulties have been found when fashionable ideas of English language teaching have been adopted by Chinese scholars and teachers. Some problems in practice concern differences in class sizes, types of learners, their habits and needs, or availability of material resources (He 1998; Jin and Cortazzi 1998a, b; White 1989; Young 1987). Most importantly, Western researchers and educators have detected that it is the cultural differences

which are among the root causes which render exporting methods more difficult for practising ELT in Chinese contexts (Cook 1991; Cortazzi and Jin 1996a, 1996b; Hudson-Ross and Dong 1990; Jin and Cortazzi 1993, 1995, 1998a, b; Kohn 1992; Melton 1990; Scarcella 1990). Another specific example concerns literacy strategies (Hudson-Ross and Dong 1990; Kohn 1992; Parry 1998), where the basic differences may result from the language differences discussed in Chapter 2. Therefore, there is a danger that some Western methods may 'violate' the traditional Chinese culture of learning. In sum, what Western teachers perceive as such 'good' language learning strategies may be different from those perceived by Chinese teachers or students (Biggs 1998; Bremner 1998; Parry 1998).

There are three distinctive features which tend to appear much more frequently in Chinese classrooms than in British classrooms. These relate to the structure of the social hierarchy, the prevalence of memory-based learning, and pattern drill practice. These are discussed in turn below.

4.4.2.1 Hierarchy structure in classrooms

The Chinese classroom process of triangulation among the teacher, the student, and the textbooks can be quite different from most practices in Western classrooms (Cortazzi and Jin 1999). Traditionally, Chinese teachers are regarded as an authority and as source of knowledge, who will perform the social and academic role of parent to students. Teachers' responsibilities are to 'convey righteous knowledge and moral standards' (傳道 *chuandao*), to 'teach knowledge from books, (授業 *shoyie*), and to 'solve pupils' puzzles' (解惑 *jiehuo*) from Confucius' ideas about being a teacher (Cortazzi and Jin 1996a). Even in modern pedagogy, Chinese students still tend to perceive teachers as models (e.g. Huang 1998).

In the expectation arising from this social hierarchical model, students should obey and give much attention and respect to their teacher, listen carefully and quietly to whatever teachers say in classrooms, without doubting or contradicting teachers' ideas in public. This is because teachers are comparable to parent figures; they are

the authority in classrooms and manifest a parental social caring (but with authority) to students. There is a Chinese saying: *'yi ri wei shi, zhong sheng wei fu'* (一日為師，終生為父), *'once a teacher, a father for life'*.

Therefore, it will not normally be a surprise to observe the following in Chinese contexts: (1) students do not normally voice questions, doubts, or challenges to their teachers in class; (2) teachers are the main speakers; (3) teachers write down rules of English on the blackboard for their students; (4) students keep their heads down to take notes. To outsiders the class may look monotonous, because the general process of English classes is teacher-centred with little or no learner-centred activity; students tend to keep quiet, without asking questions or challenging teachers' ideas.

This phenomenon may derive from cultural constraints, because, firstly, Chinese students tend to be shy and obey those in authority (i.e. observe the rule of conformity), so they are afraid of doing or saying something wrong in class and tend to believe that the teacher is infallible. Secondly, Chinese students are taught to have the virtue of modesty, so even if they know something in class, they seldom express it publicly in case this is thought to be boasting or to show pride in knowledge. Further, it seems to be natural to have teachers as 'information-providers' and students as 'knowledge-takers'. Such aspects of the Chinese culture of learning may parallel some Western ones of previous generations but they are now distinct from current Western ones, and the cultural sources are different.

This Chinese tradition is quite distinctive from the Western philosophy of liberal learning, which has been characterised by the pursuance of creative and independent thinking, of challenges, arguments, group or team discussion. Therefore, a four-centred *knowledge transmission* model of ELT in traditional Chinese language classrooms and a four-centred *communication* model of ELT in British classrooms has been proposed (Cortazzi and Jin 1996a: 154-155). The former model emphasises a mastery of knowledge through the teacher, textbook, grammar, and vocabulary;

whereas the latter focuses on learners and a development of skills through tasks, interaction, and language functions.

4.4.2.2 Memorisation-based learning

One of the main emphases in learning for students in ancient China was a tradition of mechanical memorisation (e.g. Choo 1994). Teachers asked learners to memorise and recite what they had been taught. As a traditional Chinese saying goes, *'When one can memorise three hundred poems of the Tang Dynasty, one is sure to be able to compose poems of one's own, even if one is not a poet'*. Chinese people have been told that memorisation can enhance the ability to internalise knowledge as the basis for being creative later. It was widely believed that quotations from texts memorised mechanically (not necessarily with comprehension) would likely come to be used appropriately when needed later. Such thinking is likely to be influential on most current Chinese students and is, of course, reinforced by widespread emphasis on memorising and reciting texts in the Chinese language classrooms. These practices are apparently transferred to English language classrooms.

Moreover, as discussed in Chapter 2, Chinese literacy learning requires repetition and memorisation, so that such a learning style may affect other learning tasks, given the important role of reading and writing throughout the curriculum. Even in modern times, indications suggest that Chinese students' learning habits for English is still memory-based (Alptekin 1993; Maley 1986). This practice is, however, somewhat different in origin and emphasis from previous Western practices of rote-learning which are now almost universally disparaged.

But apart from recognising such a Chinese culture of learning, there are now doubts that memorisation is always negative (Biggs 1994, 1996, 1998; Kember and Gow 1991; Marton, Dall'Alba and Kun 1996). Instead, memorisation may involve repetition, comprehension or understanding. Further, where the West, in general, may assume memorisation is a more negative learning strategy, it brings academic success in Chinese contexts (e.g. Biggs 1996). It is not unreasonable if many

Chinese students attempt to transfer strategies which led to success in Chinese to their learning of English.

Further, some research findings (e.g. Heuring and Rong 1995), suggest that Chinese learners may not only use memorisation strategies but a wide range of selections from Oxford's (1989) *Strategy Inventory for Language Learning*, for 'good' language learners. Moreover, Chinese students may frequently disapprove of "memorising lists of words" (Jiang 1990).

4.4.2.3 Textbooks, vocabulary books and methodologies

In order to enhance memorisation, practice may focus on pattern-drills and repetition. This is partly because learners of the Chinese language, particularly for literacy, need to engage in much repetition (tracing, copying, and rewriting Chinese characters) in order to make progress. This can be seen to relate to drills, pattern practices, and choral repetition in learning English, which have remained an influential legacy of audio-lingual approaches to language teaching in China long after they became outdated or strictly limited in Western contexts. It is also partly because the competitive Chinese school and university examination system with its emphasis on vocabulary, grammar and reading comprehension has caused a 'wash-back' effect. However, such practices are quite different from current Western approaches to generating creative cognitive styles.

An underlying consistent feature of the culture of vocabulary learning is also revealed, if not always directly, in the ways materials are designed (Cortazzi and Jin 1999). In the Taiwanese ELT market, there are numerous vocabulary learning books claiming to use modern approaches to vocabulary learning, so that learning can be more fun and easier (Chen 1997; Chen 1998; Jiang 1998). Cortazzi and Jin (1996a) also cite examples of best selling EFL vocabulary books in China. These are particularly popular among some university students because the English banding system specifies levels of vocabulary knowledge as published lists of words. To pass a particular band level for English, students will be expected, as a minimum, to

know the listed lexical items. Not surprisingly there is a popular market for self-study books which claim to help students to reach these specified vocabulary levels.

The two main features from these vocabulary learning books for Chinese learners are still memorisation-based by using topic-grouping and word-analysis. While such books are also published for British learners of French they are less commonly used. There are far fewer of them in shops, and they are less specifically tied to compulsory examination levels. In addition, such wordlist books for French are normally used for survival use, like travelling. English coursebooks published in Britain are more widely focussed and involve more learning techniques. Moreover, even the books used for examination purposes still tend to contextualised vocabulary-development and use of a variety of techniques (e.g. Kenny and Johnson 1993; McNab and Crossland 1993).

Nevertheless, without a systematic comparison of the coursebooks, objective arguments can hardly be made. And this does not mean that the general coursebooks used for learning English in Chinese contexts are always as narrowly focused as the published vocabulary books. Still, materials used for teaching a language embody the underlying culture of learning. The coursebooks used for learning Chinese as a foreign language can be criticised for their underdevelopment. The majority of the coursebooks tend to be more conservative, old-fashioned, form-focussed, with fewer pictures (or colours) than EFL or French materials. They frequently include pattern drill practice, and are less task-oriented (Liu, Deng, and Liu 1988; Scurfield 1991; Wei 1995).

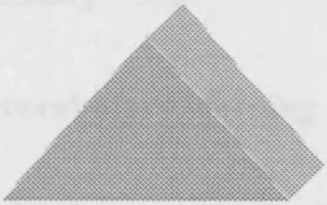
Overall, based on a comparison of ELT methodologies developed mainly within English-speaking cultures and transported to Chinese cultural contexts as discussed, several contrastive features concerning the nature of teachers, learners, and textbooks have been analysed (see Figure 4.2). This figure is derived from Cortazzi and Jin (1996b), which draws on a number of Chinese sources, and the present writer's summary of contrasting trends in Chinese and English cultures of language

learning (see 4.4.1 – 4.4.2). It is worth noting that the published work referred to above comes from both Chinese and Western observers.

Figure 4.2: Contrastive roles of teachers, students and textbooks in language classroom between Chinese and English speaking cultures of learning

	Chi	Eng
authority	+	-
initiate	+	-
teacher talk	+	-
dependence on textbooks	+	-
accuracy	+	-
use	-	+

teachers



students

	Chi	Eng
initiation	-	+
student talk	-	+
independence	-	+
pair work	-	+
autonomy	-	+
model-follower	+	-

textbooks

	Chi	Eng
tasks	-	+
group work	-	+
main source	+	-
pattern drill	+	-
form-focused	+	-
task-varieties	-	+

Chi: Chinese; Eng: English
(NB: The degree "+" is higher, greater or more emphasised than "-".)

The comparison in Figure 4.2 is based on the trends between the two cultures, and their general approaches to language teaching and learning. These are not absolute differences, and they are not likely to apply in every detail to all teaching contexts involving two cultures of learning. However, the significant point here is how such tendencies in academic culture might constrain vocabulary teaching and learning (see next section). The contrast will focus on the extent of the relationship between two points in the triangle which have been emphasised concerning the culture of teaching and learning in classrooms.

But these contrasts need to be interpreted with some caveats. These are broad generalisations and they will not necessarily apply to all individuals in either of the cultural groups concerned. The cultural groups comprise, obviously, some degrees of diversity. Further, there are some indications that the Chinese culture of learning is changing, although perhaps only in some places as yet and quite slowly (Cortazzi and Jin 1996a). Most importantly, such a contrast does not imply any superiority or inferiority from one side to another. Despite some Chinese principles of teaching practices (like rote learning or pattern drills) which seem to far from CLT approaches, the success of Chinese students' academic performance near the top of the international rankings for Maths/Sciences cannot be ignored (McIntosh 1997; Reynolds 1996; Wingert and Greenberg 1996).

4.5 Cultural beliefs about vocabulary learning

4.5.1 Willing's (1988) study

Against the reported findings supporting a notion of different cultures of language learning, Willing (1988) argued that cultural differences are not so crucial. He investigated 517 adult learners of English as a second Language in Australia, and analysed the possible correlation between learning preferences and biographical variables. These were: (1) ethnic group; (2) age group; (3) level of previous education; (4) length of residence in Australia; (5) speaking proficiency level; (6) type of learning programme (full time or part time students). His intention was to test the general belief that these variables have an effect on preferred ways of learning. Questionnaire and interview methods were the two tools for data collection in his study, and had been carried out during the course.

One of Willing's findings showed that none of the above variables correlated significantly with any of the learning preferences. Learners' ways of learning were considered to be universal. Different choices may depend much on the learners' personality. Willing used the result to classify four general types of learners' personality.

4.5.2 Cultural versus common learning strategies

It is still, however, too early to conclude absolutely whether cultural background does or does not influence L2 learning methods based on Willing's evidence. Willing's strong version of excluding this factor can be due to several particular features of his sampling. The first reason is that the subjects he used were from various cultural backgrounds, and few specific cultural groups consisted of a large number of learners. This may make the variable of ethnic factors invalid. The second reason is that, as mentioned, the subjects were all immigrants, and some of them might have stayed in Australia for a long time. For example, if the oldest age of the subjects was 56, this person could not present an educational culture of learning on the same level as a young undergraduate. Arguably, as adult migrants, it is likely that many had educational levels of attainment which were well below those of current university students. It is also likely that many of the subjects as permanent residents in Australia would identify with their new home. Hence one might expect high levels of integrative motivation and some adjustment towards Australian culture, including an Australian culture of learning. This is also possible with students of an L2, who may also travel to target countries; but students are less likely to regard themselves, generally, as migrants. While this possible adjustment is by no means clear-cut, it is a confounding factor for the ethnic variable which Willing has not discussed. Further, Willing's study, like most studies into language learners' strategies is unidirectional: only the learning of English is considered, not the learning of other languages by, say, English speakers. The present study attempts to tackle this point.

Besides, Willing's study does not investigate vocabulary learning behaviour as a specific category in depth, so it is still questionable that vocabulary learning strategies do not derive from culture *per se*. As Oxford and Crookall (1990) indicate, '[c]ultural and ethnic differences in learning styles may be very important and should be considered in understanding how people learn vocabulary' (p.25).

Willing's study was conducted in an L2 learning context, where the subjects were all immigrants. In contrast, Cortazzi and Jin (1996a) and Schmitt (1997) embarked on their study in China and Japan respectively where English is a foreign language (see 4.2), and where exposure to Western cultures is much less than for a migrant in Australia. They used questionnaires and a follow-up interview to investigate preferences of Chinese or Japanese learners of English learning English vocabulary. Their subjects could fulfil the qualitative representation of culture in as much as all subjects clearly identified themselves as Chinese or Japanese, and permitted the researchers to investigate a very specific language learning skill, i.e. vocabulary learning.

Yet the above studies were not, in themselves, comparative studies, so there is still something that needs to be answered further. Unsolved questions are: (1) Is the behaviour of vocabulary learning culturally specific? (2) Do British students of other foreign languages really not use rote or word lists for vocabulary learning because their culture of learning does not encourage them to do so (cf. Freeman 1999)? It may be true that "an L2 user's mental lexicon *resembles* that of an L1 users and the learners make semantic, phonological and associational links between them" (Carter and McCarthy 1988a: 16). Nevertheless, the strategies they employ may differ from culture to culture due to the different ways of memorisation, contrasting views of word difficulty, and particular forms of storage of interlanguage, or because previous experience and knowledge will be a starting point to figure out new words of the L2. For example, Spanish learners of English may employ syllables to learn English words more often than Chinese learners of English do, whereas the latter use word formation more often than the former. Meara (1984) found out that Chinese learners have difficulties with long words, so perhaps the strategy of constructing words out of their parts is preferable. As for memorisation, Western learners may intend to organise words through sound shapes (Aitchison 1994), whereas Chinese in Hong Kong were found to employ more visual memorisation for learning both Chinese words and English ones (Liu 1986).

However, apart from learners' conscious preference of choosing certain strategies for vocabulary learning under a consideration of learners' former educational culture, perhaps the difficulty of deciding the best strategies of learning vocabulary may depend on whether the L2 words can be related to an L1 word, or whether the L2 meaning can be readily conceptualised or not in the learner's L1 cultural experience (McCarthy 1990: 129). As MacWhinney (1995: 313) states, "learners have markedly different profiles of skills and that the interactions of these different profiles with different target languages could produce a variety of stage reversals and skill reversals". Clearly some of these speculations depend on particular sets of target vocabulary items, rather than on unspecified vocabulary in general.

4.5.3 The evidence of the cultural beliefs of vocabulary learning strategies

This chapter has so far highlighted some differences of the academic culture of language teaching and learning between Chinese and Western (British/American) students. According to the two contrastive models (see Figure 4.2), vocabulary methodologies for the former have been mainly focused on word-lists, translation, and rote learning skills. Rote learning, as indicated by Jiang and Jin (1991), is particularly emphasised by students as a means of memorising words, because they believe that it will be the "most efficient way of learning words", and passing paper examinations (p. 69).

The British approach to teaching and learning vocabulary may emphasise these strategies rather less. Rather, as implied in the arguments presented (see 4.4), British learners may emphasise a wide variety of techniques, either to demonstrate meanings of a word, or to organise structures of a word through its lexical relations, collocation and word derivation. From the cognitive points of view, it is generally claimed that the increased use of deep processing strategies, like associative techniques, or using mental images, will become a more effective means of vocabulary learning (Brown and Perry 1991). From semantic or schema theory, it has been found that learning a word involves a network of perceptions or concepts, that cannot be learned effectively through one-to-one meaning translation (Beheydt

1987; Carrell 1984; Channell 1981). Further, from discourse theory, vocabulary learning is viewed inseparable from the larger frame of language (Carter 1987; Carter and McCarthy 1988a; McCarthy 1990; McKeown *et al.* 1985; McKeown and Curtis 1987; Meara 1980, 1983, 1987; 1992a; Nation 1982, 1990; Wallace 1982). How far the latter aspects of theory have influenced British (or Chinese) approaches to vocabulary learning seems an open question, which is investigated in Phase I.

All the above contrastive evidence seems to show there is likely to be a contrastive culture of vocabulary learning when comparing Chinese learners of English with British learners of Chinese. However, further cautions should be mentioned. The term 'culture of vocabulary learning' does not mean that the model is static or fixed, as culture itself may be undergoing a process of transition and modernisation (cf. Willing 1989: 19). Particularly among younger generations there is evidence that some Chinese students may be changing from the more traditional Chinese culture of learning (Cortazzi and Jin 1996a). Or, students can at times adopt new strategies which may go beyond their present learning style paradigm (Ehrman and Oxford 1989; Oxford 1993). In China, there may be a broadening of the uses and range of strategies from one educational level to another (Cortazzi and Jin 1996a). Also, there may be a danger to stereotype or identify a particular learning style with a particular ethnic group, yet a student may use one particular style in one situation and other types in another (Scarcella 1990). That is, there remains one fundamental approach to learning Chinese characters including *Pinyin*, basic characters, radicals, and the order of strokes, and then following with phrases, sentences, and texts, which is a bottom-up approach. In the mean time, grammar-translation and audio-lingual approaches are emphasised in foreign language. These may be perceived as mechanical learning, but there is also a wider framework of literacy combining with forms, meanings and contexts within the teaching of Chinese in China (Parry 1998). If group trends for vocabulary learning strategies are identified, and if these are different for two groups (such as Chinese learners of English and British learners of Mandarin), this does not mean that the trends necessarily apply to all individuals in either group.

In the recent ELT development in Chinese contexts, there is increasing attention being paid to vocabulary teaching, and claims for ways of improving English vocabulary teaching programmes (Chia, 1996; Ding 1987; Gu 1997; Hong 1989; Hsieh 1996; Li 1998; Yu 1992; Lin 1996; Liu 1992; Tang 1986; Yue 1991; Zhang 1998). The main urge of this apparent teaching reform may start from recognising the importance of vocabulary in English learning, identifying multi-aspects of a word, and the problems of translation between English and Chinese. This means that the most frequent long-list memorising strategy needs expanding by many other useful strategies. Indeed, this shows that some transformation of the traditional Chinese ELT model is influenced by the Western ELT model and has become an 'eclectic' model at this moment (Cortazzi and Jin 1996b). For vocabulary learning, newer teaching techniques have been advocated in China (Li 1986; Li 1987; Hong 1989; Yue 1991; Yu 1992).

There is a danger that the two cultural models of beliefs of teaching or learning may be overexaggerated or stereotyped. Yet differences may be only meaningful when there is a comparison such as in the present study, to examine any tendency that one group may more or less frequently employ one method more than the other. To take memorisation as an example, many studies on learning styles and learner strategies (previously cited) have shown that Chinese subjects prefer to memorise words relatively more than other groups do. But it is dangerous to conclude that memorisation is the only or main feature of a Chinese culture of language learning or that CLT is the main one of an English-speaking culture of language learning. What is important is to establish the overall framework of the learning strategies and then examine the trends within such framework. As Holliday (1994) warns, culture can be defined, more often than not, in a rather loose sense due to its complicated diversities. Therefore, within L2 research, it is necessary to carefully report and describe the "host culture complex" (p. 29). He, further, argues that in L2 classrooms, it is unlikely that some features within the complexity in one culture

will exist without other cultures. Therefore, he believes there rarely exists a "virgin culture" in L2 classrooms (p. 50).

Nevertheless, Western researchers seem to neglect how Chinese learners perceive their own language learning, especially about their own evaluation of memorisation. And most importantly, there may be only a partial comparison between Chinese and other Western students. Recent research investigations which adapted Oxford's SILL strategic questionnaires, showed that memorisation strategies were not frequently used (Bremner 1998; Goh and Kwah 1997; Gu and Johnson 1996; Hong and Huang 1998), despite the recognition of memory focus as one of the Chinese language styles. These limited sources examining Chinese contexts have in fact argued that modern Chinese learners of English do not believe memorisation is a good method, and do not often use memorising strategies. In particular, the memorisation strategies have been used least frequently compared to other types of strategies listed in taxonomies such as Oxford's (1990). Furthermore, there is a claim that Chinese students are aware of the weaknesses of the use of memory strategies (Hong and Huang 1998). Such findings are against the stereotype that memorisation seems to be the main strategy that Chinese students employ. However, such findings may also invoke the caution as to whether all the specific mnemonic strategies in the SILL questionnaire are understood by Chinese subjects' beliefs of memorisation. Also, such findings largely or solely from questionnaires, need to be cautiously interpreted if other research with careful interviewing finds evidence to the contrary (Cortazzi and Jin 1996a).

Overall, such counter evidence may show paradoxes and reveal the deficiency of not knowing how Chinese learners learn compared to how Western students learn L2 vocabulary. To avoid any preconceptions of vocabulary learning, there is a need to have a two-way investigation, i.e. not only looking at how Chinese students learn an L2, but how English-speaking students learn a foreign language, like Chinese. Moreover, it is necessary to investigate how the two different ethnic groups interact with learning particular words (see Phase II), otherwise subjects' responses on

strategy questionnaires can only be at a general level, since they are not related to actual target words. The analysis of such questionnaire data cannot be related to particular lexical domains or environments. As MacWhinney (1995: 292) points out, "the ways in which target language structures interact with individual differences in language learners has never been seriously investigated". He hypothesises that "if there are such interactions, we would expect to find certain learning patterns in which our normal expectations for language outcomes are reversed" (ibid.).

Cross-cultural or comparative studies, such as the present one, are therefore necessary. The present study, in its design and methodology, seeks to meet such objectives. Before detailing the methodology of this study, it is important to consider how Chinese culture and English speaking cultures deal with vocabulary learning.

4.6 Conclusion

In recent years, great attention has been paid to learners' language learning strategies, on the basis that awareness of learners' own methods can enhance teaching. As vocabulary learning is a major part of language, focusing on the ways learners learn vocabulary should be regarded as important, within the need for caution about the reliability and validity of learners' own conscious level of self-reporting in investigations (e.g. Cohen 1998; Oxford 1996b). More discussion on the instruments used for exploring students' beliefs of vocabulary learning strategy will be given in Chapter 5.

This chapter has presented studies which particularly involve learners' self report data on the ways they learn vocabulary both in and out of the class. While there may be some reservations about the accuracy of self-report data in relation to actual practice, it seems reasonable to accept findings based on such data at the level of cultural beliefs. From a review of a handful of research studies on how learners view their own vocabulary learning, it is clear that there is a wide range of methods that learners use. Yet, it may not be possible to cover such a variety of methods in classroom teaching. Further, there are so many target words to learn, that teaching

learners how to learn vocabulary explicitly and indirectly has equal priority as teaching knowledge of particular selected lexical items (Parry 1991; Schmitt 2000). Thus, it is arguably more efficient to help learners to explore a variety of lexical learning strategies both to increase the range of strategies available to them and to help them develop a sense of whether and how to make appropriate choices to learn particular words in different kinds of contexts, according to given classroom tasks or learning and situational need.

However, when teachers define vocabulary teaching, great attention is paid to the teaching of vocabulary knowledge (Sanaoui 1995), but less to systematically and formally teaching learning methods. For example, taking notes can be the strategy the majority of the learners heavily depend on (Thorne and Thorne 1992), yet systematic teaching of different ways of taking notes for vocabulary learning is rare. Teachers may lack information about appropriate varieties of ways to make suggestions to their students (Schmitt and Schmitt 1995).

Learners' strategies are used differently due to cultural variables. While there is a need to train students to use strategies more systematically and be responsible for their own learning, it is also important to understand the precise nature of cultural differences of learning before researchers can draw any definite suggestions and implications to specific teaching and learning contexts, with learners of particular cultural backgrounds.

Moreover, in interpreting cultural ways of vocabulary learning, researchers always have to be cautious, because classroom methods can change. For example, traditionally, in the past, language was taught mainly emphasising grammar and translation in the West. But communication has become a goal, and with the development of the new technologies, most learning strategies have been broadened, including the use of audio-visual aids, language laboratories, and the internet. On the other hand, despite technological change, learners may still be using pre-technology strategies.

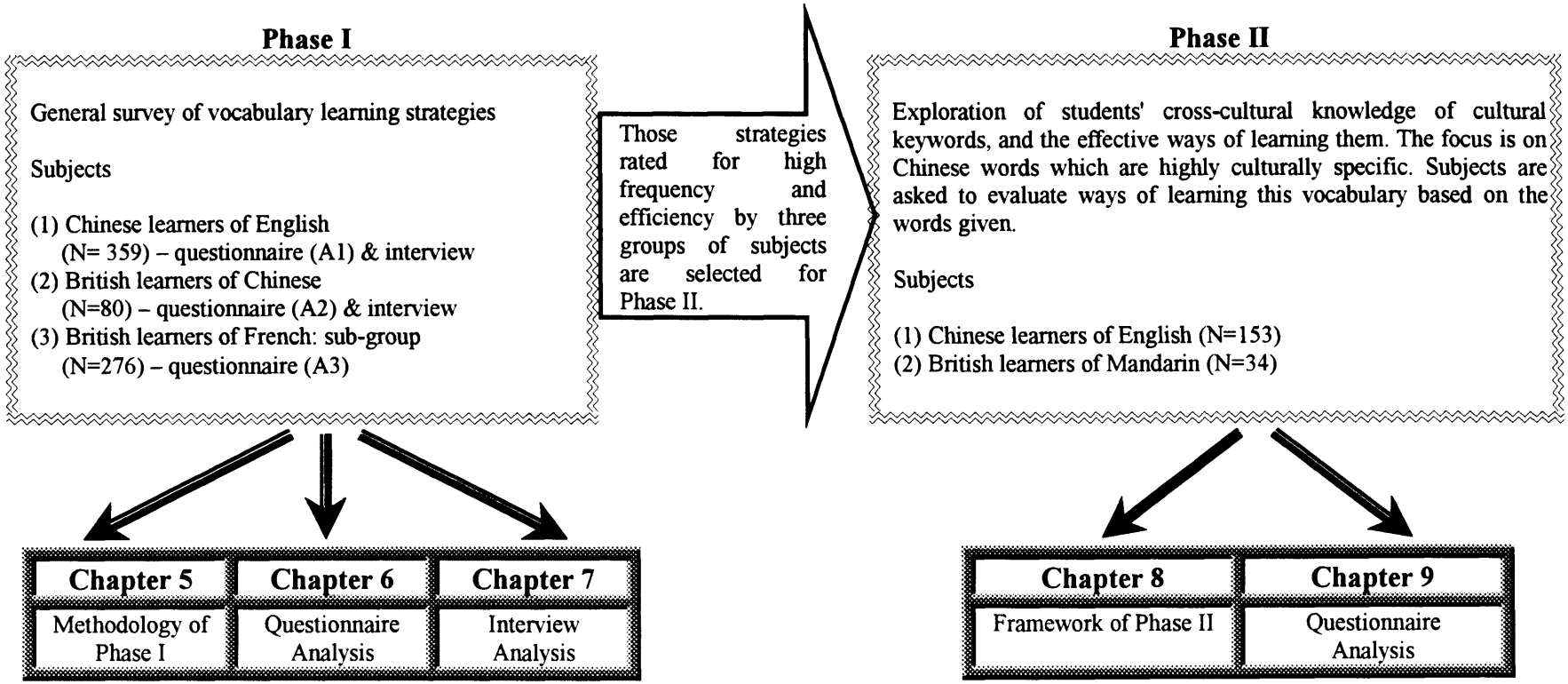
It has been argued that there are cultures of learning which may be specific in their emphasis to particular groups of learners. There may even be different cultures of vocabulary learning. However, there is as yet very little information about how the cultural mode may constrain the ways learners learn vocabulary. Neither do we know to what extent Chinese cultural models of learning have been transformed due to the impact of Western modern language pedagogy. In particular, learners' strategies have rarely been studied in relation to particular lexical domains or sets.

As these conclusions indicate, there are strong reasons why it is important to investigate the vocabulary learning strategies of particular groups of learners. The present study takes Chinese learners of English as one major group in the domain of English learners and investigates their vocabulary learning strategies. It compares these with a group which might be thought to employ complementary or mirror image strategies – British learners of Chinese. A third group of subjects – British learners of French – is also used as a comparable group, i.e. how British learners learn French vocabulary compared to learning Chinese vocabulary. This will comprise Phase I of the empirical work of this study. Phase II will investigate British/Chinese vocabulary learning strategies in relation to a particular set of lexical items. The next Chapter discusses research hypothesis, assumptions, and sampling of this main research study.

PART II

METHODOLOGY - BASIC DESIGN, FINDINGS, AND DISCUSSION

Arising from current awareness of the importance of learning vocabulary (Chapter 2), recent research in the field of learners' own vocabulary learning strategies (Chapter 3), and the culture of vocabulary (Chapter 4), Part II discusses the methodology used in this study (consisting of Phase I and Phase II) and discusses the results arising from the analysis.



CHAPTER 5

METHODOLOGY OF PHASE I

5.0 Introduction

The literature review reveals a possibility that students' cultural backgrounds and their L1 learning experiences may influence the ways they learn L2. Phase I of this study investigates how university learners in two cultures, i.e. Taiwan and Britain, learn English and Chinese vocabulary respectively, along with the third comparative group, British learners of French, in order to highlight cultural and language influences. The third group was included because the researcher was aware of the fact that some vocabulary learning strategies may be employed differently due to different language learning levels, since there are differences between the first two groups; the years of learning experience of British learners of French (BF) is generally more equivalent to those of Chinese learners of English (CE), where the length of experience of British learners of Mandarin (BM) is generally less (see Figure 5.1).

This chapter first discusses the aims and design of the survey study of Phase I, the assumptions behind it, and its connection with Phase II (in Chapters 8 and 9). Then it introduces the development of the questionnaire, and of the interview. The subjects involved and the procedures of conducting this study are discussed next. Finally, the chapter evaluates the research methods used.

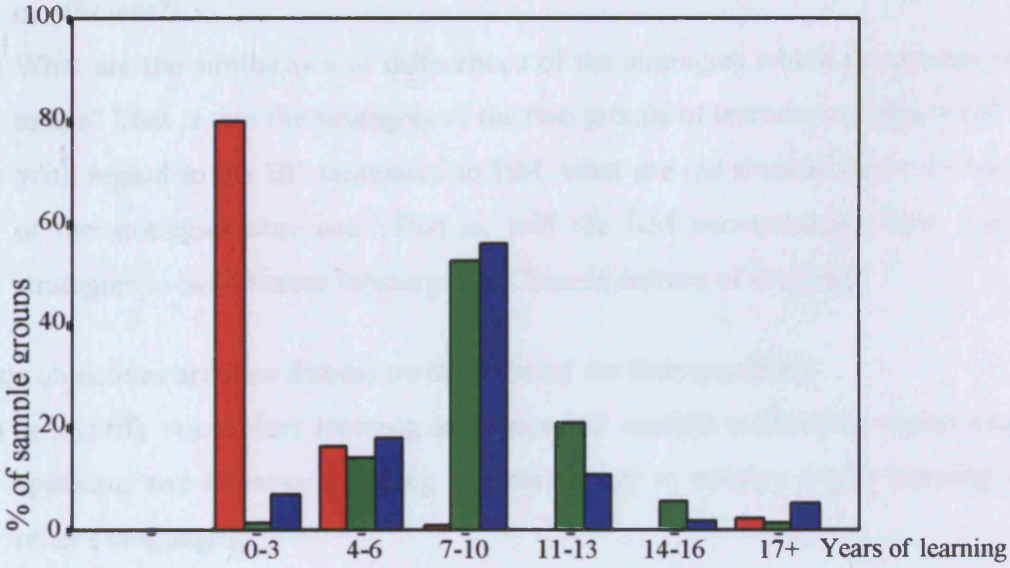
5.1 The orientation of the study

5.1.1 General assumption behind Phase I

A general assumption in this study is that Chinese and British students will adopt asymmetrical strategies in learning the vocabulary of English and Chinese, respectively, i.e. the strategies will not be, mutatis mutandis, parallel. This asymmetry is thought to be likely because the greater the linguistic/cultural distance

between two languages (X and Y, i.e. Chinese and English), and the cultures of the respective native speakers, the greater the probability that learners (speaking X or Y as L1) of the other language (Y or X as L2) use asymmetrical ways of learning that language, relative to each other. Since Chinese and English are widely held to be linguistically and culturally distant from each other, this assumption that speakers of these backgrounds learning each other's languages will adopt different or asymmetrical strategies seems reasonable.

Figure 5.1: Percentages of sample groups and number of years spent learning the target language



The three groups of subjects: British learners of Mandarin (BM)
Chinese learners of English (CE)
British learners of French (BF)

Based on the previous considerations of current research trends in the literature, the general predictions of the present study will be as follows:

(1) CE will say they use less varied techniques and less contextualised methods than English learners of other foreign languages due to the influence of their traditional learning and teaching styles, i.e. BM and BF will use a wider range of vocabulary learning methods.

(2) Students' beliefs of their customary techniques, and their beliefs about the 'best' way for learning new vocabulary will be asymmetrical, between CE and BM.

That is, they will not simply use strategies which are mutatis mutandis mirror images of each other.

5.1.2 The research questions and the objectives and of the Phase I study

This first phase of the study was designed to explore adult learners' use of learning techniques and beliefs of vocabulary learning methods. Four basic research questions were:

(1) Which vocabulary learning strategies are claimed as the most frequently used by the two different ethnic groups of learners?

(2) What kind of vocabulary learning strategies do they perceive to be most useful or efficient?

(3) What are the similarities or differences of the strategies which the groups claim to use? That is, are the strategies of the two groups of learners asymmetrical?

(4) With regard to the BF, compared to BM, what are the similarities or differences of the strategies they use? That is, will the BM accommodate their learning strategies to the Chinese language, or Chinese culture of learning?

Four objectives are then framed on the basis of the four questions:

(1) to identify vocabulary learning strategies and specific techniques which English speaking and Chinese speaking students claim to employ while learning each other's languages;

(2) to assess how frequent and efficient these strategies are, according to learners' own beliefs;

(3) To discover the nature of any relative differences in the strategies used by the two ethnic groups of learners.

(4) To discover the nature of any differences in the strategies used in relation to the target language (particularly French versus Chinese for the British learners).

5.2 The connection between Phase I and Phase II

The intention of Phase I is to use students' self-report evidence and in their responses on the questionnaire to find out their overall beliefs of the strategies they often use either in or outside classrooms. Therefore, the result of the *frequency* measure will

show their stated customary techniques for vocabulary learning; the result of the *efficiency* measure will show their own self-rated value of ways of learning words either from their results of the examinations they have been through, or from their own belief in the efficacy of various vocabulary learning strategies. Such beliefs may show students' learning behaviour as rooted deeply in their own thinking, and/or in their cultures of learning. The latter will include students' ideal models. Evidence supporting the more socially-based culture of learning interpretation may be derived from group scores (mean scores and standard deviations).

Phase I of the study will be further supported by Phase II (see Chapters 8 and 9) through providing a set of 6 specific cultural keywords to further investigate students' beliefs of vocabulary learning strategies when frequently and efficiently applied to some special and difficult words. While the two phases are connected, they were designed to retain their own individually methodological frameworks.

There is one main reason for designing two phases. The development of learners' language learning strategies (e.g. Oxford 1990) and the cultural dimensions in foreign language learning (e.g. Byram 1989, 1997, 1999; Byram and Esarte-Sarries 1991; Byram and Fleming 1998; Harrison 1990), in general, seem to remain two major but separate research fields. The former does not pay much attention to particular words that learners learn; the latter focuses on the learning of word knowledge rather than on the strategies used for such learning. The design of the two phases within the two research frameworks may be able to provide comparable findings, and to link them together as a further step ahead. Thus, this study was designed not only to explore learners' general vocabulary learning strategies, but also to focus on some difficult cultural key words to explore how learners' general strategies are applicable for learning a particular set of words. In parallel, there is an exploration of how learning this set of words differs between Chinese and English speakers.

Supposedly, there are interactions between the culture of vocabulary learning strategies and the vocabulary learning of cultural key terms, such that culturally specific aspects of learning and understanding lexical items can be identified, at least

in particular lexical fields. This will mean that with a given lexical set of culturally key terms in, say, Chinese, that Chinese and British students will have different understanding of these terms and different beliefs of how they are best learned when they are target language items. This may be simply a result of differences in language levels, but it may also be because the target vocabulary and its cultural contexts may affect the ways learners employ methods, when language systems between the L1 and L2 are different. Additionally, asymmetrical approaches to vocabulary learning strategies may be adopted if Chinese and British students favour different emphases in learning strategy uses.

If there are no differences of learning these sets of specific words, it may mean students perceive certain strategies as generally applicable for learning certain types of words, irrespective of the students' linguistic or cultural background.

5.3 Overview of the research methods in the Phase I study

A survey research study in educational contexts aims at collecting information that is helpful for conceptualising, exploring or investigating research problems and hypotheses. It may provide a quantitative or qualitative picture as a means of understanding or identifying the population from which it is drawn (Keeves 1997; Babbie 1990). Two of the most prevalent data-collection methods in L2 survey research are questionnaires and interviews. Questionnaires and interviews, in many ways, seem to compensate for each other's advantages and disadvantages. Robson (1993: 227) describes the former as "a fixed sequence of largely closed questions", and the latter as the "free-range" approach, which allows greater flexibility of responses. The latter is more time consuming, often more extensive, with more possibilities of probing, yet more limited in getting a range of responses from respondents in a short time than the former (Cohen and Manion 1994: 272).

A questionnaire method provides the advantage of saving time and expense, which benefits many non-longitudinal research studies. This is perhaps the reason that in many research studies on students' language learning strategies, interviews and questionnaires go hand in hand, and this study is no exception. Oxford (1996b)

supported the use of questionnaires as being among the most efficient and comprehensive ways of investigating students' frequency of language learning strategy use. She stresses that "compared with the other strategy assessment techniques, *student-completed strategy questionnaires* have a very important and appropriate use" (ibid. p. 37).

The instruments used in this survey were questionnaires, as a main tool, and interviews, as a supplementary way to gather data. The 'supplementary' status of the interview does not mean that it has second-class status in this study. It simply means that due to a difficulty of collecting interview data of the BF group, it may be criticised as less extensive and less structured than the questionnaire investigations (see Chapter 7 for further discussion of interview limitations). Each subject completed a questionnaire for the exploratory study to obtain large-scale quantitative information about the use of vocabulary learning strategies. The obvious limitations of both the questionnaire and interview methods adopted are that any results relate to students' claimed use or stated behaviours and beliefs rather than to actually observed learning behaviour or tested learning. However, this study is focussed primarily on the former level of beliefs and, while it is likely that these relate closely to behaviour, the study does not investigate this relation nor does it claim to deal with actual learning behaviour. In view of the common uses of questionnaire and interviews this does not, in itself, seem a problem. That is, this study aims to provide both a quantitative and a qualitative picture as means of understanding the claimed use of vocabulary learning strategies of the sample population from which it is drawn, i.e. Chinese and British language learners at university level (see later section on subjects).

5.3.1 Quantitative instrument

5.3.1.1 General Layout

Concerning the format of the questionnaire (Questionnaire A1, A2 and A3), the questionnaire is designed so respondents will complete items using a Likert scale in a table. For each item (see Appendix B), there is a fixed base statement 'When

studying English/French/Chinese vocabulary, I...' in the top column, and afterwards, there are different statements which complete the stem in the following rows. The subjects need to answer each statement about the *frequency of use* of their each strategy using five scales: 'never', 'rarely', 'sometimes', 'often', or 'always', and to judge the *efficiency of use* of the same strategies using five scales: 'useless', 'not so good', 'unsure', 'good', or 'very good'. It was not thought necessary to have a neutral term or 'don't know' item in the first column about frequency for two reasons. First, it is highly likely that students would be aware of whether they use the strategies or not and therefore, to rate the frequency should not be problematic. Second, the use of this scale in a survey of this type by Cortazzi and Jin (1994, 1996a) had not been problematic with their Chinese respondents. In contrast, to include the neutral item of 'unsure' on the efficiency scale seems appropriate for the more cognitively based items in part two since participants may indeed be unsure of their evaluation of different strategies (see Chapter 6 for the coding of 'unsure' in analysis).

An alternative of presenting more open-ended questions in this main part of the questionnaire was used as a supplementary elicitation technique to allow for extra replies and free expression but not as the main format since the more closed format of the Likert scale should prevent subjects from not responding to such open-ended questions clearly and completely. In the Likert scale, subjects need only tick the grid for each item in a pre-formulated technique, according to their own beliefs.

Before the main table of the questionnaire, following convention, there is a small section for collecting data on students' background information. This consists of items about sex, age, major (i.e. main degree subject), years of learning L2, and experience of learning other languages. This study did not intend to investigate how these variables might affect subjects' beliefs of learning L2 vocabulary. But the researcher did not rule out a possibility that they may have their individual or co-varying effects on the subjects' responses to some extent (Ehrman and Oxford 1989; Green and Oxford 1995; Oxford 1990). Nevertheless, in a preliminary analysis, the researcher used a *nonparametric chi-square* test to explore gender differences of CE (Male =173; Female = 184), but there were no significant differences (p=0.56). This

result suggests that there was no difference between Chinese male and female students' vocabulary learning strategies. This leads to reject that gender is an important factor to influence Chinese learners' L2 learning strategies. This finding was also confirmed by Tsai's (1997) study, along with the results of Heuring and Rong (1995).

After the personal information column, two separate sets of the tables are designed in which learners are asked to record their beliefs of the frequency and efficiency of specific vocabulary learning techniques. *Frequency*, as explained in the questionnaire, means how often one uses each method; *efficiency of use* means how useful one thinks each method is, or might be. This design is based on the thinking that frequency may well represent students' surface beliefs of the commonest strategies which they use. On the other hand, evaluating the efficiency of each strategy may reflect their deeper level of beliefs about how useful each of the strategies can be whether or not they claim to use a particular strategy. The assumption is that it is possible that some methods, which are used frequently by a student, may not actually be considered the best ones, or that some considered efficient are not actually used.

To allow the possibility of recording further free responses on alternatives, which are not listed in the questionnaire, four open-ended questions are given after the grid. Three samples of the questionnaire, which were respectively given to Chinese learners of English, British learners of Mandarin, and British learners of French are displayed in Appendix B. The only difference between them is, of course, an alteration of the target language in some items listed on the questionnaires.

5.3.1.2 Formulating the content

Since the layout of the questionnaire plays an important role to get the subjects' co-operation, the two sets of the Tables were printed in one piece of paper. Questionnaire items in the two separate tables both started from number 1. In the front table, there were 24 items and in the back table, 34 items. This design intended to give the subjects' a first impression that this was not a lengthy questionnaire; this

could be important if time or cooperation were limited. There was a reminder printed on the questionnaire to turn over to the other side, and on the back page, to check all the questions in the both sides were completed. Moreover, before distributing the questionnaires, the researcher would remind assisting teachers or respondents directly to fill in other sides. In addition, questionnaires were printed on light coloured A4 paper in order to make them more visually attractive.

The questionnaire items are derived from published research into language learning strategies and vocabulary learning. The first table of the questionnaire was adapted from the 24 items inventoried in the work of Cortazzi and Jin (1996a). Their questionnaire was drawn up as follows. They first asked 212 Chinese learners of English in China an open question: "*How do you learn English words?*" Responses were then listed in a questionnaire, expressed by means of the same terms the learners had used. Essentially, this part of the questionnaire is therefore based on Chinese university students' self-rating of the frequency and efficiency of strategies identified as being common by Chinese learners of English. The main reason for adapting their work as part of this study is because the results of their study can be regarded as a pilot investigation for this study. Moreover, if the results derived from this part of the questionnaire are confirmed by other ethnic Chinese, say Taiwanese as in the present study, the result may well show the extent to which culture variables influence the way students think of vocabulary learning strategies. Further, this part of this study is intended to maintain a certain degree of 'continuity' with other researchers' frameworks, so that the result can be cross-referred and critiqued (Meara 1997). Other specific work on Chinese learners' strategies, such as that by Gu and Johnson (1996), or work on classifying vocabulary learning methods under language learning taxonomies by Schmitt (1997), were not available to the researcher at the time of designing this questionnaire, although the results of the present study can be compared to these other studies.

Nevertheless, as results from Cortazzi and Jin (1996a) have shown, the introspective strategies mentioned by Chinese students in Mainland China tended to be more activity-based. For example, students tended to think of the activities or materials

that may or may not help them to learn, such as TV programmes, newspapers and the like. By implication, it is important to be aware that other strategies emphasising cognitive activities (i.e. highly unverbalised or at a deep level of one's subconsciousness) are likely to be missing from their student-derived questionnaire. Therefore, a complementary more cognition-based part was considered necessary. The second table of the questionnaire, then, consists of 34 items which are more cognitive-based questions on information-processing, association, and memorisation. These items were derived from the work of Ahmed (1989), Cohen (1990), and Cohen and Aphek (1980), i.e. from published research which is not specifically related to Chinese learners.

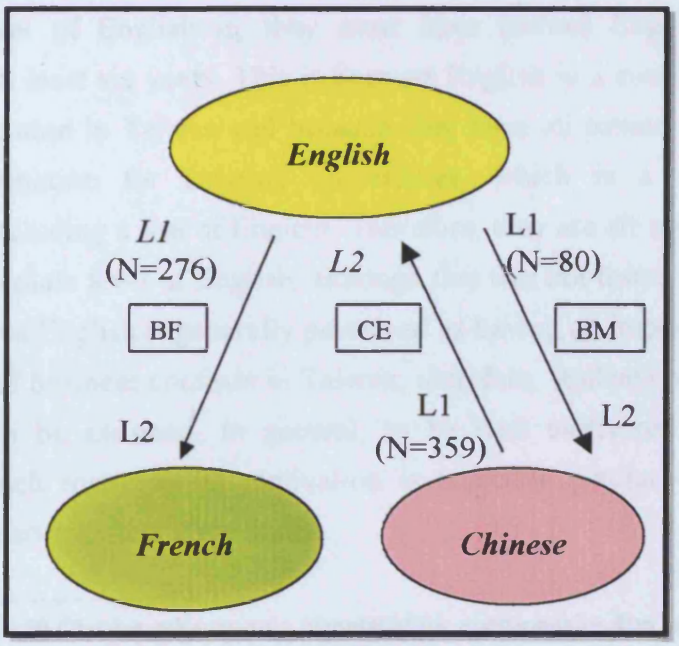
Overall, these 58 items of vocabulary learning methods were designed to stand for an 'ideal' of vocabulary pedagogy which was mentioned in Chapter 3. Appendix C shows the general classification of items. The classification, however, may be arguably crude and subjective. Yet it may be difficult and arbitrary to give a definite category of each learning method, as some strategies may overlap with other categories. But the purpose of the classification is to indicate the fact that, firstly, the 58 items in the Phase I are framed in an ideal nature, however they may be grouped. Secondly, some strategies may relate to different purposes of learning, so when they are used properly, they may be termed as 'good' vocabulary learning strategies, and vice versa. For instance, using games can fit into some perspectives of the **2C-5R** model, but this does not mean that one game can fulfil all of the learning aspects at one time.

Such classification need not necessarily imply that distinguishing strategies as 'good' or 'bad' without evaluating the pedagogic purposes is in fact justified. Although it may be true that there are some differences between 'good' and 'bad' language learners evidenced by the range of the learning strategies they tend to employ, it does not necessarily mean that this is equivalent to a distinction between 'good' (or 'bad') language learners and global language learning strategies (i.e. not only for lexical aspects).

5.3.1.3 Subjects who completed the Phase I questionnaire

Questionnaires were given to three different groups of L2 learners: 359 Chinese students of English in Taiwan, 80 British students of Chinese, and 276 British students of French, who were all randomly chosen from universities (Figure 5.2). The selection was 'random' in the sense that their proficiency of the foreign language has not been controlled or even tested, because the main purpose in this study is to identify the range and the 'commonest' use of the vocabulary learning strategies, by the different groups of L2 learners. In general, since all three groups of subjects have successfully passed competitive examinations to enter university, including L2 requirements, it can be assumed that all the students in all the groups are to a fair extent successful and proficient in language learning. While the British learners of Chinese may be relative beginners, nearly all of them have high grades in one or more other L2 languages at 'A' level. The other two groups will have been successfully studying their target language for at least 6 years, i.e. throughout secondary education in order to qualify for their present university courses.

Figure 5.2: Overview of the Phase I subjects



⟶ : learning a target foreign language

CE = Chinese learners of English; BM = British learners of Mandarin; BF = British learners of French

As Figure 5.2 shows, the main focus of this study, in general terms, is to investigate the possible asymmetry of vocabulary learning strategies between CE and BM. The third strand of BF was added to give the possibility of examining how speakers of the same L1 (English) might adopt different vocabulary learning strategies for quite different target languages (Chinese and French). Clearly it would have completed these data sets (in an ideal world), if French learners of English and Chinese, and Chinese learners of French could have been added.

However, this was not done because it would have entailed fieldwork in France and considerable logistical difficulties in finding a sufficient number of French learners of Chinese or Chinese learners of French. This is clearly a limitation in the design but the data from the three groups actually sampled should generate sufficient results to be of interest and to formulate answers to the research questions of this study.

5.3.1.3.1 Chinese Students of English (CE)

The 359 Taiwanese subjects[14], including non-English majors were studying at Cheng Kung University, Jing-Yi and Feng-Chia universities in Taiwan in 1996-97. These universities and the students' levels of English can be considered broadly representative of university students of English in Taiwan. No matter what their proficiency level of English is, they must have learned English as a Foreign Language for at least six years. This is because English is a compulsory subject in secondary education in Taiwan and because they have all passed the national joint entrance examination for entering universities, which is a very competitive examination, including a test of English. Therefore, they are all supposed to have at least all intermediate level of English, although this was not tested in this study. It is worth noting that English is generally perceived as having an important role in many professional and business contexts in Taiwan; therefore, students of English at these universities can be assumed, in general, to be well motivated to achieve high proficiency. Such instrumental motivation is basically similar to the other two groups of the learners used in the study.

[14] The majority of 359 Chinese subjects only completed the questionnaire data, and did not participate in interviews. The main interview participants of Phase I were from students in Wenzao Polytechnic, which will be introduced in a later section.

5.3.1.3.2 British Students of Mandarin (BM)

The 80 BM[15] were found with some difficulty in the universities of Oxford, London (SOAS), Durham, Lancaster, and Westminster. The sample here was smaller because each Chinese department in these universities has comparatively far fewer students than departments of French; therefore, it was necessary to visit several universities to administer the questionnaires and interviews to these groups. Apart from the subjects in Westminster University, every questionnaire and interview was administered personally by the researcher herself, as it was difficult to find a teacher to help to administer them. It would have been impossible to obtain this data set in any other way, as the directors of the departments were concerned that their students would not participate without a direct request from the researcher herself.

Given the relatively small numbers, nationally, of BM at university level, the sample of 80 is actually quite substantial and it was, in any case, very difficult to gain access to this group in reasonable numbers. The 80 students in this group, in general, do not have over five years' experience of learning Chinese language. This is problematic for comparison with the other two groups of students, but they all have more experience in learning European languages, since they all have at least one good 'A' level pass in a foreign language. Besides, they possess a strong motivation towards Chinese. Chinese is widely recognised as a significant language in the world and a language which, since it is spoken in some form by some two billion people in countries which are important economically and politically, is worth learning for many business or professional purposes. It is widely considered to present challenges to English speakers, especially for reading and writing. Therefore, their opinions of L2 vocabulary learning are likely to have contrastive values compared to the other two groups. Very recently, higher education in the UK and in China or some private sectors (e.g. in Hong Kong) increased the funding for Chinese language education. This will presumably promote greater motivation for larger numbers to learn Chinese in due course.

[15] 42 out of the 80 students participated in interviews after they had completed the questionnaires.

5.3.1.3.3 British Students of French (BF)

The 276 BF participants are from Modern Languages Departments at Leicester and De Montfort Universities. They are mainly French language major students, although some were studying French with German, Politics or Law, etc. They are all assumed to have reached a high standard of French at 'A' level prior to university admission. All the questionnaires were conducted and administered in the academic year 1996 to1997.

Again, regardless of their real proficiency levels in the target language, they are all adult learners, who are learning foreign languages in universities, and who are assumed to have certain types of learning strategies influenced by their former cultural and educational experiences. Because the subjects have been learning a foreign language in their own native country, the data should provide a substantial basis on which to examine foreign language learners' beliefs of vocabulary learning in terms of frequency and efficiency of strategy use.

5.3.1.4 Procedures of administering questionnaires

A pilot test was conducted with a sample of 10 Chinese students of English and 9 British students of Chinese to ascertain the time needed to complete the questionnaire, and whether there was any difficulty in understanding the content of items. Overall, it took approximately 20 minutes for British students, and 25 minutes for Chinese students to complete all items. Few questions were asked. A few British students of Chinese asked about the examples of the derivation of Chinese words in items 23 and 35 (see Appendix B). Whereas English or French verbs often show features of word formation, this is not the case for Chinese verbs. However, there is some similar word analysis between English (or French) and Chinese. For example, in English, the meaning of some compound words (e.g. 'postbox') can be guessed by examining the free morphemes ('post', 'box') which comprise the word. Similarly, in Chinese, the character for wood (木) which combines reduplicatively and semantically to become forest (林) and this is one way to use radicals and phonetic elements in the composition of Chinese characters (see Chapter 2). Therefore, the derivation for some Chinese characters will be in some ways different or simpler for

this group of subjects. In order to avoid confusion, it was thought better to mention this to British students of Chinese before they completed the questionnaires in the main study. As there was no need to change the format and layout of the questionnaire, these 19 responses were included in the main data set.

As for the administration of the questionnaire to BF, it was found that the French tutors (some of them were course directors) were particularly interested in this project and they requested a summary of the research findings. This perhaps relates to growing awareness of tutors of linguistic (rather than literary) aspects and language learning methodologies of French, coupled with the great attention paid to learning French in Britain. French is widely considered a significant world language which is very useful in Europe and beyond for business and professional purposes.

When conducting the Phase I research in Taiwan, questionnaires were also passed to the tutors of the classes. Most of them were acquainted with the researcher. Although there was some positive feedback on this study, most of the teachers apparently administered the questionnaires as a favour to the researcher, rather than from a sense of the needs of research or pedagogical purposes.

A similar response was found in Chinese language departments in Britain. Certainly many course directors were willing to help as long as time was available. But some of them did not specialise in Chinese language studies, so they may not be especially interested in researching how to learn or teach Chinese. Even if some of them were Chinese teaching staff, their interest may lie more in teaching literature, politics or business, rather than Chinese language teaching pedagogy. In the process of collection, one lecturer specialising in Chinese classics suggested to the researcher that findings from this study might be more helpful to an education department rather than his Chinese department. In another institution, a lecturer mentioned that reporting findings from this study would be appreciated by the students who had participated in the investigation but perhaps not by others who did not participate. These personal encounters seem to imply that knowing how to learn is not a focus for some Chinese language departments, and the results derived from these samples

may not actually seem relevant to some who teach or learn in these departments (see 5.4.2).

Although it was not the purpose of this study to elicit details about the different approaches to management or ideology of foreign language teaching among these 3 groups of subjects, their different responses to the research investigation seem to imply that there are different levels of modernisation within foreign language pedagogy and teachers' or learners' training: English teaching (EFL) seems more developed than that of French, which in turn is more developed than Chinese teaching. These are impressions, however, which remain to be supported, or not, by other investigations.

5.3.2 Qualitative data – Interview

Among the diverse approaches to qualitative research, interviewing is an invaluable tool to investigate people's beliefs, ideas, stories, emotions and the like. It is a widely used research tool because asking questions is an instinctive nature of human beings (Fielding 1993). This study used interviews to supplement the questionnaire results. The interviews are intended to explore students' self-report data of their own vocabulary learning methods. The interview analysis may probe, explain or support the results arising from the questionnaire data. Importantly, it allows students to report their own experiences or provide examples.

5.3.2.1 The structure of the interviews

There are many forms of interviewing. Conventionally, methods are classified by the degree of the structure of the questions (Fielding 1993; Nunan 1992b; Robson 1993). Structured interviews use questions prepared in fairly strict sequences; semi-structured interviews use prepared questions but they may not strictly follow the order; non-structured interviews are more open discussion on the topics rather than being driven by pre-designed questions. Ideally, according to many standard research methods texts (Bogdan and Biklen 1992; Nunan 1992b; Seidman 1991), the process of an interview has to allow some flexibility to minimise any subjectivity imposed by interviewers, if the interview intends to probe the interviewee's beliefs

or experiences at a deeper level. Questionnaires are generally a more efficient way to obtain quantitative data. As Seidman says, in-depth interviewing "is not designed to test hypotheses, gather answers to questions, or corroborate opinions. Rather, it is designed to ask participants to reconstruct their experience and to explore their meaning" (ibid. p. 69). Structured interviews are more likely to lead to short closed answers. Unstructured methods seem better when possibly rich and detailed information is needed, since such information will most likely need to be gradually teased out, perhaps in a series of in-depth interviews. The semi-structured interview may keep a balance between the two other types. That is, it tends to get in-depth data, but also tends to keep some control during the interviewing process and to make a measure of consistency for analysis, since all participants will have discussed the same topics.

There seem to be no absolute advantages concerning which type of interview to use, because the underlying research purposes may differ from one study to another. But there seems to be a basic consensus that the semi-structured interview is perhaps more favourable, as the agenda is controlled by the interviewer but without losing the flexibility that meanings, beliefs, and experiences can be developed by the interviewees (Nunan 1992b: 150).

This research study used semi-structured interviews, that is, open-ended questions were prepared in advance by the researcher. The interviews were intended not just to find out which vocabulary learning methods were mentioned by the students but to ascertain how each method is spoken about, to elicit participants' experience in their own words in order to analyse their beliefs of vocabulary learning.

The interviews, then, should yield a more in-depth understanding of this issue but without losing possible effectiveness of analysing and comparing the results. Subjects were asked about their use of learning strategies for vocabulary in the classroom, and outside of it. The series of planned interview questions started from their retrospection of words that they recently learned, the general ways they use to learn vocabulary, their opinions of the best methods of learning target vocabulary,

their beliefs of how others learn, descriptions of the best ways of teaching vocabulary and any differences of learning Chinese or English as foreign languages. The last question in the following list about cultural awareness plays a role as a pilot study for the Phase II study. Detailed interview questions were as follows[16]:

- Can you think of some Chinese/English words which you have learnt recently? How did you learn them?
- How did you learn words in general?
- What are the best methods of learning Chinese/English vocabulary?
- Are the best methods different from learning other languages?
- Do you recommend any particular methods of learning Chinese/English vocabulary?
- How do other people in your class learn Chinese/English vocabulary? Do you think their methods are useful?
- Think of the best teacher teaching you Chinese/English vocabulary? Why do you think the teacher was/is good?
- When do your teachers introduce new words? (e.g. pre-text, in-text, post-text...).
- How do your teachers introduce new words?
- Can you think of any examples of Chinese/English words which have different cultural concepts from yours?

These questions aimed at probing participants' beliefs of selected aspects of learning vocabulary, and at stimulating a range of participants' responses using different types of questions. They were carefully formulated in order to avoid "closed" answers (Dillon 1990), because it was considered important to obtain not only the methods they may be aware of, but any evaluation they may express in their own words. However, in the event not every question was used for each group of the interview, nor did questions follow a strict order. All the interviews began with item 1 to warm up the interviewing process, and allow interviewees to have some situational reflection about any words recently learnt and the ways of learning them.

[16] Chinese students focussed on the ways they learn English; British students focussed on the ways they learn Chinese.

In conducting the interviews, the interviewer did not intend to limit interviewees' responses, so after a question had been asked, the interviewer strove to talk less, and tried not to interrupt, unless the interviewer could not understand what the participants were saying, or if they strayed too far away from the theme of the interview, or whenever there was silence.

Group interviews were mainly used in this study. Because of the constraint of time offered by students and institutions, it was possible to see students in groups but it was not feasible to conduct individual interviews. The number in each group was between 2 and 6 participants. Only occasionally were individual interviews possible in this study. Individual interviews have been considered better than group interviews by some researchers (Drever 1995), because there is more opportunity for individual talk and opinions to be shared between interviewer and interviewee.

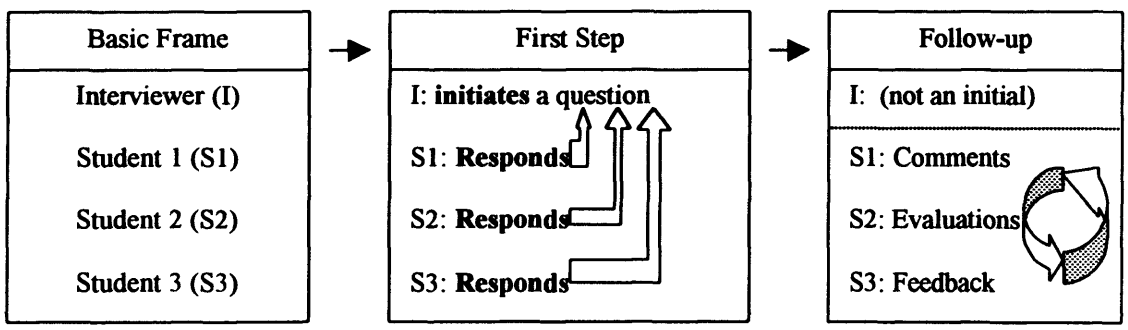
Nevertheless, by comparison, there are benefits in the group interviews used in this study. When students were interviewed in a group about their approaches to vocabulary learning, there were fewer periods of silence; if there was a silence for one speaker, another would often continue to express the same, or a contrasting point of view. Moreover, when interviewing students in groups, in general, less time is spent on breaking the ice if the researcher is a stranger. When one was speaking, others also evaluated their peers' statements. They either showed their agreement at the time or disagreements afterwards. The former statements can be taken as reflecting the whole group's belief, whereas in the latter case two or more different beliefs are quickly elicited. This kind of natural evaluation by classmates seems to be a particular advantage in group interviews for this study.

However, there are dilemmas when analysing group interviews data, listed as follows.

(1) Statements may be difficult to categorise, because vocabulary learning strategies may be used in mixed combinations. Therefore, it is difficult to isolate a clear-cut single item to classify as listed in the questionnaire.

(2) Interview data occur in discourse contexts. The interview of Phase I may follow several sequences (Figure 5.3). It is generally the interviewer (the researcher herself) who initiates every question to students, normally, in a group. So students overall take turns to respond interviewer's questions. As mentioned later in 5.3.2.3, the interviewer tried not to dominate the conversation during interviewing, so that students could initiate or respond in turn themselves. Such data may firstly derive meaning from the whole interview context. Secondly, there can be negotiation of meanings in the group. Within such discourse contexts, what may normally occur is non-verbal evaluation: gestures or noises for appreciation, agreement, disagreement or even amazement, while one person is making comments. In one sense these evaluations multiply the power of the expression of opinion or experience, since this is then approved by the whole group.

Figure 5.3: Some patterns of discourse in group interviews



(3) Referential terms like 'I', 'We', and 'You' or other address forms may have shifting reference. Thus, 'I' may be only the speaker but, if others apparently agree, the statement it may 'belong' to the group. 'We' might mean the speaker plus one other, or others, or the whole group present, or the whole class (only some of whom are present), or conceivably, everyone of the speaker's L1 who learns the L2 under discussion. 'You' might likewise be ambiguous within the group: used to refer to the interviewer, or, conceivably, to the interviewer's language or cultural community, which is Chinese. This can lead to difficulties

in tracing the origin and strength of opinions expressed but ambiguities in this respect can often be resolved by reference to subsequent interview talk.

Codings and patterns are often imposed as categories when analysing qualitative data, but problems of analysing natural language, which may vary from one context to another in the interviews as indicated above, seem to be overlooked. However, in linguistic research, there has been a focus on not only analysing the language itself but also examining carefully the social norms of the subjects. In the research literature on interviewing, there seems to be little regard for the interview as a structured speech event, yet it is important to highlight rules, expectations, roles, rights, and the like, which are also factors which underlie how the data have been collected. Such factors, furthermore, can affect the data themselves. For example, apart from eliciting answers, an interviewer's questions, in a sequential interview, have the additional function of giving to interviewees indirect feedback on previous answers, which some interviewees may use to deduce real or imagined underlying beliefs of what this interview is supposed to be about. Meanings are often, in fact, negotiated in the interview process: questions, answers, comments, backchannels and other talk can all give indirect feedback, and any of these can be two way, not only in one obvious direction. This is problematic when meanings are imputed solely to interviewees.

In the present study, the researcher was aware of such dimensions in interviews and tried to avoid the more obvious guiding of negotiated meaning, while at the same time she tried to appeared natural, neutral, but conversational.

In this study, the research involved two different (generally speaking) cultural groups, and interaction in the groups, particularly in the ways of discussion, were quite different. Further, the discourse processes shown in two groups (e.g. see Cook 1989; McCarthy 1991), like turn taking, turn types, negotiation, were enacted in different ways.

5.3.2.2 Subjects involved in the Phase I interview

The number of British learners of Mandarin who were interviewed is 42. Most of the subjects were interviewed after they had completed the questionnaires. They were studying in Chinese Language Departments in London (SOAS), Lancaster, and Oxford University. They ranged from the first-year up to the fourth-year students, and also included a few students representing diverse ethnic and linguistic backgrounds, such as French, Dutch, Chinese and so on. One of the subjects who was of Chinese ethnic background preferred to use Mandarin in the interview to practice her Mandarin, so the data were translated into English afterwards. These several students might be considered a confounding factor, since the British group is thus apparently heterogeneous. However, the multiethnic character of contemporary British society and of universities is such that this group is typical (e.g. including British-born Chinese). The alternative of dropping these students from the interviews was not really feasible in group interviews and would have adversely affected others' beliefs, since, after all, they were peers of their classmates. Given the elements of multiethnic diversity, it seems impossible to isolate 'indigenous' British students without great artificiality. Thus, the diversity was retained, as it would have been had the CE group shown such diversity (which it did not). Unfortunately there was no opportunity to collect interview data from British learners of French. But many of the 42 British learners of Chinese had experiences in learning French.

The group of Chinese learners of English who were interviewed is 35. Students were studying in Wenzao Polytechnic (N=33), and Feng-Chia University (N=2). Students were English-majors. The 33 students in Wenzao Polytechnic were in an institution equivalent to a university, and the students are trained particularly for vocational purposes, i.e. their English is for academic and specific purposes. English is a compulsory subject, and students showed (in the researcher's observation) great motivation for learning it. These students did not participate in Phase I questionnaire research but only in Phase II. This might be considered problematic since they constitute a separate group; however, the questionnaire group seems large enough

(N=359) to be self-sufficient and the interviewed group are not dissimilar in their language learning experiences.

Although the researcher did not restrict the use to English in the interview, the Taiwanese subjects (or their tutors) preferred English in interviews.[17] In order not to let the language inhibit expression or bias the interview, the researcher reassured students from time to time, saying that Chinese could be used if they found it difficult to express themselves. Occasionally if the interviewer found there was an unusual silence because students had not understood a question, then the question was rephrased in Chinese.

5.3.2.3 Procedures of interview collection

The interviews were arranged through teachers. A much longer time than expected was needed to wait for permission, negotiation and arrangements, as it was difficult to find an appropriate time to meet the most of the students in any institution. It was especially difficult to find British students of Chinese to participate in the interviews, even if the subjects were willing to do so. First, the total numbers of students who study Chinese in British universities is far smaller than the number who study French. Second, gaining access to students proved to be a major problem. When permission finally came from one institution, there was a long interval of waiting to hear from another one. Therefore, the interview data in this study were not collected within an intensive time period, as is desirable. In addition, the major interviews of Chinese learners for the Phase I study were only accessible when the researcher was conducting Phase II in Wenzao Polytechnic. Nevertheless, the interviews were all conducted in 1996 and 1997.

Before the formal interviews, the researcher had informal interview practice with one British learner of Chinese and one Chinese learner of English to assess the time needed and to arrange the order of the questions. All formal interviews took place in

[17] In this way, the tutor was willing to offer time to the researcher as then students had an additional opportunity to practise English with an outsider.

the classrooms or common rooms of the universities. With participants' permission, interviews were tape-recorded. Fortunately this tape-recording was trouble-free.

In the process of the interviewing, thorough note-taking was difficult to carry out, as keeping full notes impedes being seen to be attentive to interviewees and might constitute a barrier in the interaction. As Nunan (1992b: 153) notices, "encoding may interfere with interview". Seidman (1991: 87), therefore, encourages tape-recorded methods to accurately transcribe the interviewees' actual words, because 'the participants' thoughts become embodied in their words' (p.87). However, key words were noted down to distinguish who was the speaker in a given group. This helped the transcribing stage afterwards.

The length for each interview was not fixed. It depended on how long the subjects could stay. Many of the students felt pressed for time because they had to attend another teaching session; some of them did not even remain after they had completed questionnaires. Each interview lasted about 15 minutes. Some lasted half an hour if the number of the group interview was larger (the largest groups consisted of 6 students of British learners of Chinese and 7 Chinese students of English).

In the process of interviewing, although avoiding interpolating her own thoughts and opinions in the discussion, the interviewer tried to nod, and use backchannels ("umm", "yes", or "I see") from time to time to show her interest and attention, and to encourage further comment from students.

Questionnaires and interviews for students were conducted while they were in classrooms. Interviews were conducted after subjects had completed the questionnaires. Administering questionnaires before interviews may help subjects have a basic idea of what the content of the interview will be, and then, hopefully, reduce some subjects' anxiety about these topics subsequently.

5.4 Conclusions and Limitations of the Phase I research methods

Questionnaire and interview methods are considered complementary in this study. This is because questionnaire items selected by researchers leave little freedom for subjects to say what they would like to say in their own words, even with some open-ended items. Therefore, there was a possibility that the researcher in fact 'reinforces' her subjects to be involved in passive retrospection. Responses to the questionnaire items may also be seen as discrete items, which they might not be in reality; there is a danger that strategies are seen (as they are listed) as separated, whereas many might be used in combination.

Regarding semi-structured interviews, however, most students can freely and actively discuss the strategies that they prefer. But obviously the researcher still had to limit the scope by raising pre-formulated questions and stopping unnecessary responses. Another weakness is that during interviewing, many strategies are not mentioned. Lack of mention does not necessarily imply lack of use. Interviews may, therefore, only show samples of the methods or techniques actually used (Cohen and Scott 1996; McDonough 1995).

Therefore, while the strengths of the two research methods chosen in this study are complementary, they are still far from being unproblematic. Most importantly, there is perhaps unavoidable *bias* encountered in this study due to the nature of it being cross-linguistic and cross-cultural. Bias may inhere in the language used in the investigation, cultural differences of perceiving a research investigation, and reliability of learners' own self-report data, which are discussed below.

5.4.1 Language used in the questionnaire and interview methods

A possible weakness of the present questionnaire is that there is no Chinese translation version for Chinese students of English, which may force some students into different (if not wrong) interpretations of some items. The reason why the English language was used for CE was that, first, teachers in Taiwan wanted the questionnaire and interview in English, since the ministration of the study was

through English departments. Second, Cortazzi and Jin's study (1996a) demonstrated that use of English was not problematic. Third, the other part of the Phase I questionnaire was derived from research studies written in English, so translating it would be problematic.

Further, it has been assumed that Chinese students at university level should have the ability to read these items in English without difficulty. However, in order to overcome this possible difficulty, the interview in Mandarin would be a good opportunity to express freely their feelings, experience, thinking, beliefs, and comments (despite the reality that Chinese subjects perceived the occasion as an opportunity to practise their English). Although there were no major problems of understanding the meaning of the items in general, it was found out that Chinese students took a longer time to complete the questionnaire. It may simply be that English is not their native language, but it is also possible that they gave more thought to their responses. Furthermore, some CE did ask directly for a Chinese translation version of the questionnaire, because they claimed that it would save their reading time. In this case, it was assumed that CE seem to have less confidence or patience of reading in texts written in English, if this is not their academic purpose (e.g. Tsai 1997). Or perhaps Chinese subjects are less familiar with questionnaire investigation which then affects their confidence to answer the English questionnaire.

5.4.2 Cross-cultural differences of responding to questionnaires

When some BM were informally asked about their opinions of this questionnaire, they mentioned that the items are very thorough. The main difficulty for them was to take more time than they assumed they would need because they had to think about how they actually learned or would learn new words. It was time-consuming because they had to judge the methods they either employ or do not often use. Such judgements were not too easy yet they were made quickly. Such difficulty may apply for the other 2 groups.

Although it was not the main intention to investigate the possible differences of the ways participants of different ethnic backgrounds respond to questionnaires, it is worthwhile pondering whether there may be different cross-cultural beliefs of answering a questionnaire from the subjects' points of view. Cohen and Scott (1996: 92) were aware that:

> "a given questionnaire may not transfer well from one setting to another, either because there are significant differences in the way that the questionnaire is administered or because the respondents in the different sites differ in how they interpret the items. This could be especially true if the measure is translated and used in other cultures."

Therefore, there is a possibility that there are various differences when the two different ethnic groups respond to the questionnaires, not only because of linguistic constraints, but also because of cultural factors. For example, Bremner (1997) argues that a questionnaire item like whether 'the learners asked questions' can be culturally and socially constrained in Chinese context. Kember and Gow (1991) also suspect that there may be cultural differences of responding to a 5-point Likert scale questionnaire item between Chinese and Australians; either of them may have a general tendency to use the extreme points of such a scale. Further, apart from responses towards questionnaires, it may also be worthwhile to take respondents' attitudes towards research investigations into account. As indicated in 5.3.1.4, there were general differences of the 3 groups of foreign language departments regarding responses towards the research. Skehan (1989: 11) pointed out "response bias" and "social desirability" may relate to possible cultural influences on the results of research studies. In any case, respondents may reply according to what they think the investigator, or society, values; this can, of course, vary across cultures. This point is developed further in 6.2.1 and 6.4.1.

5.4.3 Reliability of subjects' self-reports

Learners' own reports about the ways they learn arguably do not necessarily reflect the ways that they actually use to learn lexis. Rather, their responses may reveal more about what they believe they should do or normally do (Cohen and Scott 1996). The present study, however, does not pretend to examine actual vocabulary

learning practices. Rather, it investigates learners' memories, or beliefs about such practices, which are of course important factors influencing their real behaviours, and hence it is thought to be vital to research learners' beliefs. As McDonough (1995) emphasises belief, attitude, and action seem to be links in a chain. He mentions:

> "... what people report they believe happens to them affects their future actions, and what they attribute their success or failure to strongly affects their attitudes and motivation in further learning experiences" (p.1).

He emphasises the value of exploring learners' own evaluations or beliefs of language learning strategies, no matter how unreliable they may be. As he indicates:

> "... what we believe we are doing, what we pay attention to, what we think is important, how we choose to behave, how we prefer to solve problems, form the basis for our personal decisions as to how to proceed. An important fact about this argument is that it is not necessary for these kinds of evidence to be true for them to have important consequences for our further development. It is quite possible, indeed, as a literary common-place, part of the human condition, that the evidence on which we base our future action is sometimes invalid and untrue" (p. 9).

Having recognised the limitations and some problematic aspects of the present research in this section, the researcher still believes that this project is worthwhile, although some angles are exploratory rather than definitive.

CHAPTER 6

QUANTITATIVE ANALYSIS OF THE PHASE I STUDY

6.0 Introduction

Following the previous chapter, which described the design of the study, this chapter focuses on analysing the questionnaire data. Data in Phase I consisted of the responses from three sets of questionnaires given to Chinese learners of English (CE), and to British learners of Mandarin (BM) and French (BF) about their use of strategies for vocabulary learning and their perceived efficiency.

With a total of 715 (CE: N=359; BM: N=80; BF: N=276) copies of the questionnaire distributed and returned in Phase I, quantitative analysis was required; therefore, the data were processed by using the *Statistical Package for the Social Sciences* programme (SPSS version 6.0) for Windows. The data were used to investigate if there were any significant differences among the three groups of learners' beliefs of the 58 vocabulary learning strategies listed in the questionnaire.

The subjects participating in this study have been learning a foreign language whilst in their native country. They were randomly selected from universities, regardless of their real proficiency level of learning a target language (see Chapter 5). Such sampling may justify the premise that the data were normally distributed; after exploring the data through the SPSS programme, this was shown to be the case. So interpretation of the results obtained from the methods of analysis may be regarded as valid.

The results of the analysis may provide useful insights into foreign language learners' beliefs of vocabulary learning in terms of frequency and efficiency of strategy use. It has been assumed that if there are any significant differences, then interpretations may be made in the light of the following considerations (without losing sight of other possible interpretations).

(1) Difference between CE and either BM or BF reflects the modes of learning styles and strategies predominant in their culture, specifically, in their educational culture. That is, this difference will show that some vocabulary learning strategies, in general, differ from culture to culture.

(2) Such a cultural difference between BM and BF may also result from the target languages and their educational contexts.

In this chapter, statistical methods used to analyse the data are firstly overviewed. The rationale for the methods used to interpret the results are provided. Finally the systems used for obtaining the results, including the systems of inputting and displaying the data are presented.[18]

6.1 Overview of methods of analysis

There are two major parts of analysing the data of the Phase I questionnaire. The first part tended to treat each of the 58 items as discrete, and the second part attempted to explore underlying patterns that are derived from the higher correlated responses. Several major methods used in these two parts of analysis are introduced below.

As for the system regarding data input, the five scales for evaluating frequency of strategy use and efficiency of use were coded as '1' = 'never', '2' = 'rarely', '3' = 'sometimes', '4' = 'often', and '5' = 'always' for frequency; '1' = 'useless', '2' = 'not so good', '3' = 'unsure', '4' = 'good', and '5' = 'very good' for efficiency. If there was an item that was not responded to or one which was considered invalid (for instance, if there were two ticks for the same item) then it was coded as '9' = 'missing'.

6.1.1 The first part of analysis

Several SPSS manuals and other handbooks were followed when analysing the data and interpreting the results (Aron and Aron 1994; Coolican 1994; Harper 1991; Hinton 1995; Norušis 1993; Kinnear and Gray 1994). By means of Pearson's

[18] Results of ANOVA or t-test summarised in this study (both Phase I and Phase II) only presents the statistical significance.

correlation coefficient *r* test, descriptive statistics, and a one-way Analysis of Variance (ANOVA), it was intended to investigate how the three groups responded to each of the 58 individual items on the questionnaire.

To begin with, the relationship between frequency and efficiency was explored through Pearson's correlation coefficient *r* test (see 6.2.1). Then according to the ranking of mean scores and standard deviations obtained from descriptive statistics, the vocabulary learning methods in relation to both frequency and efficiency were further classified. It was intended that this would provide, in a mathematical graph, a sketch of the frequency located in comparison to efficiency. This model presents a spatial layout of the relationships between the perceived frequency and efficiency of the 58 vocabulary learning methods of the three groups.

In order to compare differences across the three groups, ANOVA was used. This test enabled any differences between the three groups' responses to the 58 items to be revealed. However, it cannot detect the precise direction of the differences without the aid of a post-hoc test. Scheffé's post-hoc test was chosen since it is a more conservative test which requires larger differences between means in order to achieve the significance level. Given the different sizes of the subject groups, this test is appropriate for the present study (see 6.2.2). The main purpose for running this test was not simply to know if there were statistically significant differences between the three groups of learners, as the three different groups may have had inherent differences in their nature, such as differences concerning the language they learn, and years of learning experiences especially between BM and BF, and BM and CE (see Chapter 5). Rather, the main intention was to provide a general insight into how their responses may indicate different evaluations for each individual method of learning vocabulary, and to analyse the possible causes for any such evaluations.

6.1.2 The second part of analysis

The above first exploratory analysis only considers questionnaire responses as single items, which is common in research investigations on L2 learning behaviours.

Therefore, a second analysis, Principal Component and Factor Analysis, was employed to explore the common factors produced by responses of the three groups. This was helpful in identifying the underlying patterns of vocabulary learning strategies that may be used in combination by the three different groups of participants. This second analysis was useful to compensate for the possible drawback that the questionnaire items are tested as discrete entities. In fact, this second level analysis yielded a few insights of response patterns considering the 58 items all together. Finally, the further reliability of each factor through Cronbach's alpha coefficient test, and mean differences between the three groups of learners through ANOVA along with an independent t-test were explored.

❖ Criteria of factor analysis

When there are many scattered variables in an exploratory questionnaire, Factor Analysis is useful for reducing the original questionnaire items and re-grouping items together according to subjects' responses (Bryman and Cramer 1997: 276-291; Foster 1998: 206-214; Hatch and Lazaraton 1991: 489-498; Hedderson and Fisher 1993: 173-188; Kinnear and Gray 1994: 215-230). To begin with, the Principal Component final analysis extracted the factors when their eigenvalues are above 1, unless a specific command was made before running the programme. Further, there is a need to look at the correlation between each item and the factor extracted by Principal Component analysis, thus a common Factor Analysis was run. In general, Varimax, one of the orthogonal solutions, is recommended when there is a need for a rotated result to produce a simpler structure. But at this early point of exploring the data, it was better to use an Oblimin Test, i.e. an oblique solution, to see if there was any correlation between factors. That is, unlike an orthogonal solution, an oblique solution will not cut off the possibility that factors may have correlations with each other, or, it may also be possible that the oblique result from the Direct Oblimin analysis is clear enough to produce the factor structures.

Therefore, using Factor Analysis for exploring the data involves some initial trials and re-trials to reach a better interpretation. As Borg and Gall (1989: 624) observe,

the decision as to which type of factor analysis to use involves many considerations", the researcher decided as follows;

(1) In examining the factors extracted by principal component analysis, when the eigenvalue is above 1, scales will only be set up by the stronger factors. That is, the researcher took the first few factors when analysing data, since firstly, the eigenvalues for other subsequent factors showed little differences and were very weak. Secondly, after identifying certain factors, it was possible that the same headings for the first few may be representative of other weaker factors, or that there could be only a few high loadings in the rest of the factors.

(2) Both orthogonal and oblique solutions were investigated. But first of all, running a Direct Oblimin analysis was necessary to see if there was any high correlation between factors. If there was some interrelation between the factors, then an Oblique method would be appropriate.

(3) In this study, CE were the group with a large sample; this group was then used to set up the basic scales to compare to the other two groups. Through the Factor Correlation Matrix of CE, it was shown that there were some correlations between Factor 1 and some other factors, such that a Direct Oblimin Test was employed to interpret the results.

6.2 Results of the first part of the analysis

6.2.1 Relationship between frequency and efficiency

From the Pearson *r* pairwised two-tailed correlation coefficient analysis, it was found that subjects' responses to total ratings of strategy use of frequency and efficiency were highly correlated. The relationships between frequency and efficiency all achieve a significance level of probability (p) ≤ 0.001, and the scores showed highly positive correlation (Table 6.1). Therefore, in general, what learners used frequently or scarcely, were also the items considered efficient or inefficient respectively.

Table 6.1: Results of Pearson pairwised two-tailed correlation coefficient r analysis between frequency and efficiency

CE	BM	BF
(N=341)	(N=79)	(N=274)
$r = .79$	$r = .84$	$r = .66$
$p = .000$	$p = .000$	$p = .000$

p: probability
CE: Chinese learners of English; BM: British learners of Mandarin; BF: British learners of French

Since there is a significantly high correlation between frequency and efficiency, the question can be raised whether further study can simply focus on either frequency or efficiency, but not both. However, as can be seen in Figure 6.1-6.3, there is a spread of vocabulary learning strategies away from the strict correlation. Thus, in Figure 6.2, for example, items 6 and 8 have similar efficiency but not frequency. So it is important to investigate both frequency and efficiency. Moreover, when exploring item-to-item correlation, it was found that all 58 items of both CE and BF groups achieved a highly significant level of $p \leq 0.001$, whereas a few items in the BM group do not achieve this level. Sixteen items including 1, 3, 5, 8, 9, 15, 16, 21, 22, 24, 26, 40, 51, 54, 56, and 58 are found at the significant level of $p \leq 0.01$; six items 6, 11, 31, 33, 34, and 36 are at the level of $p \leq 0.05$; five items 7, 10, 13, 17 and 32 show no significant correlation. Items like 6, 17, and 32 have obviously much higher mean scores of efficiency than of frequency. This implies that although due to the restriction of BM's exposure of Chinese and their levels of language learning, they believed that listening to the radio programmes, watching cartoons/comics and using a monolingual dictionary are useful.

In order to illustrate an overall picture of the relationship of the 58 items between the frequency and efficiency, the following intends to sketch a frequency-efficiency (F-E) model. The descending ranking of the mean scores obtained from descriptive statistics are shown in Appendix D. These two tables provide an understanding of how students value the various vocabulary learning strategies discreetly in terms of frequency and efficiency of the 58 methods. On the one hand, the Tables show that, in general, the three groups of subjects have different rankings of the 58 items

according to the descending mean scores. It is interesting to note that the CE group has generally lower mean scores compared to the British groups.

Also of interest is that the two Tables show that some learning methods regarded as highly efficient are in fact not often used. Some methods with high frequency of use may not necessarily be regarded as highly efficient. Further attempts were made to see how frequency and efficiency of the 58 methods may relate to each other. In order to demonstrate this relation clearly, the researcher adopted a mathematical X-Y axis representation as employed by Cortazzi and Jin (1996a). Figure 6.1 represents this for CE, Figure 6.2 for BM, and Figure 6.3 for BF.

The 58 vocabulary learning methods are classified in Figures 6.1 - 6.3 according to the mean scores of the respondents' ratings. In these Figures, a mean score of 3 is used as visual reference point, such that on the efficiency scale (the vertical axis), strategies with a mean rating of 3 or above and which are therefore believed to be efficient by a likely majority of the students are shown in the top of 2 quadrants, i.e. in sectors A and B, while for frequency (the horizontal axis) strategies rated as frequently used by a majority of the students are to the right of the vertical axis, i.e. in sectors A and D, while those not frequently used are in Sectors B and C. Sector A strategies are considered both frequent and efficient; Sector B are strategies not very frequently used yet efficient; Sector C includes the ones that are neither rated as frequent nor efficient. Sector D contains any strategies which are frequently used but are considered inefficient. However, there are no items in this group.

The three figures clearly show a distinct difference in the pattern of the ratings between the Chinese group and the two British groups. Obviously the Chinese have a quite condensed pattern of F-E ratings when compared to the other two groups. British students in general showed a more varied set of responses. Such variations may have resulted easily in statistically significant differences when comparing them, as will be shown later. However, arguably, comparing mean scores across cultures is not without problems, especially when the subjects of different cultural backgrounds have such different attitudes in responding to the questionnaires.

Figure 6.1: F-E model of vocabulary learning strategies of Chinese learners of English

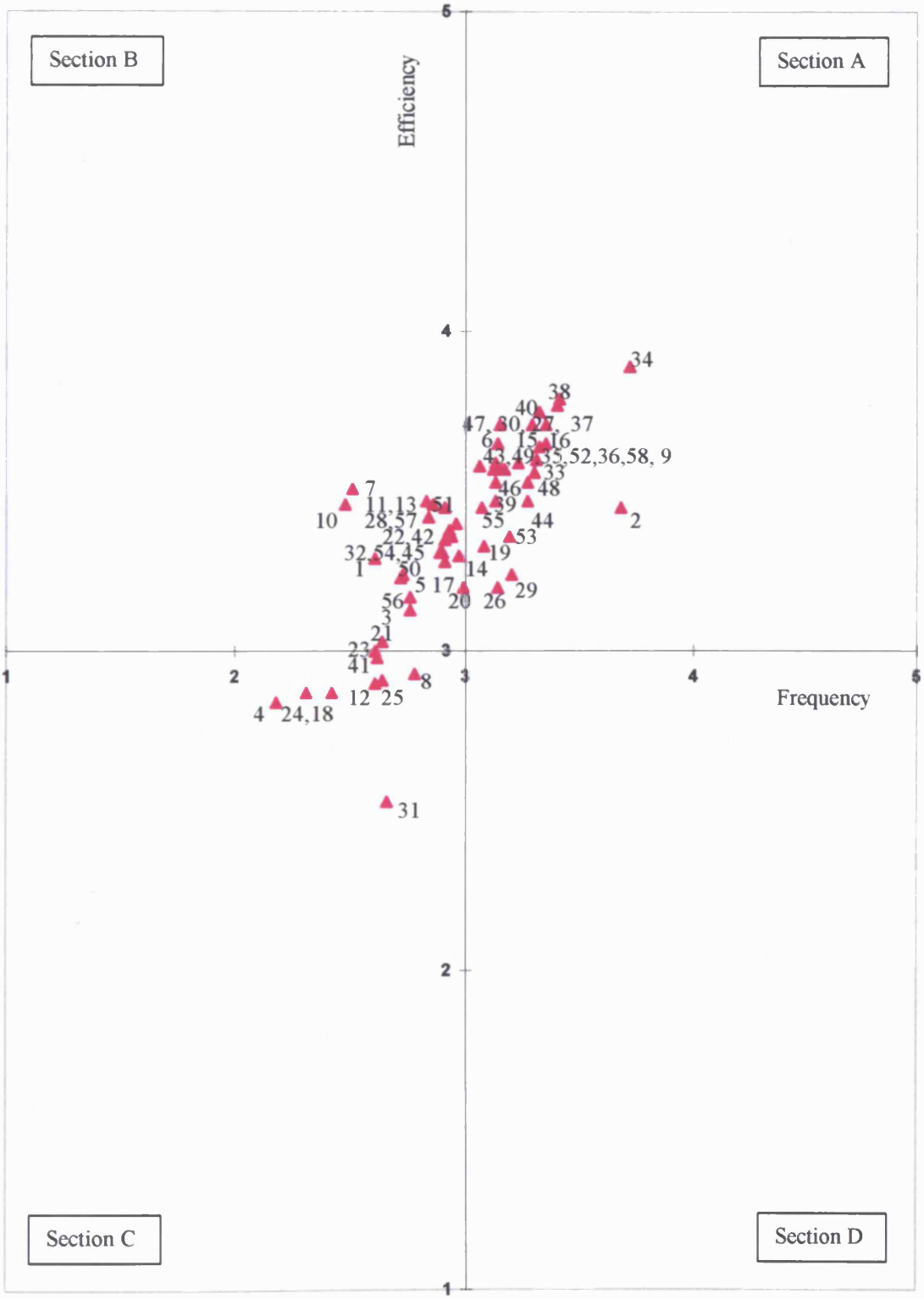


Figure 6.2: F-E model of vocabulary learning strategies of British learners of Mandarin

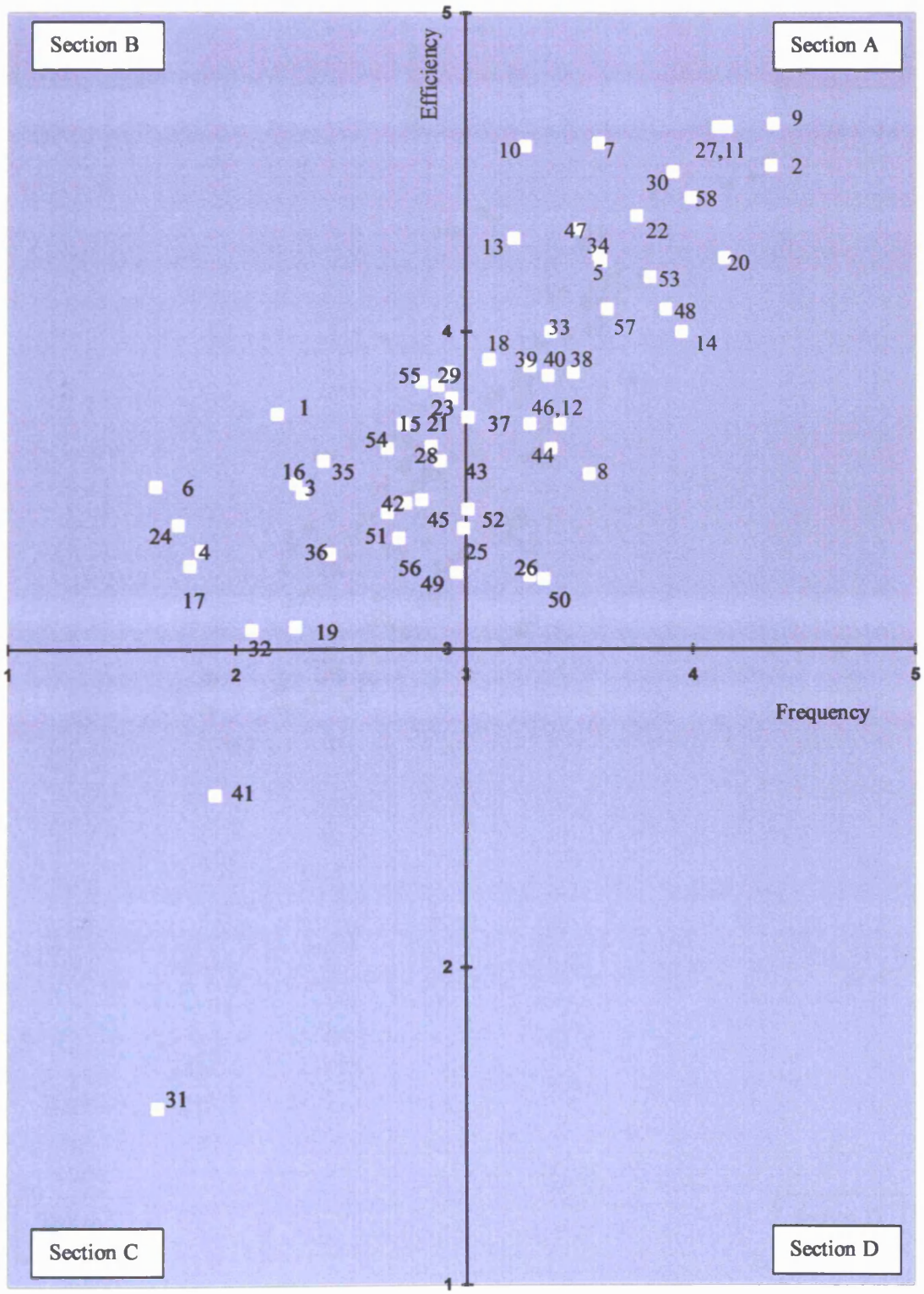
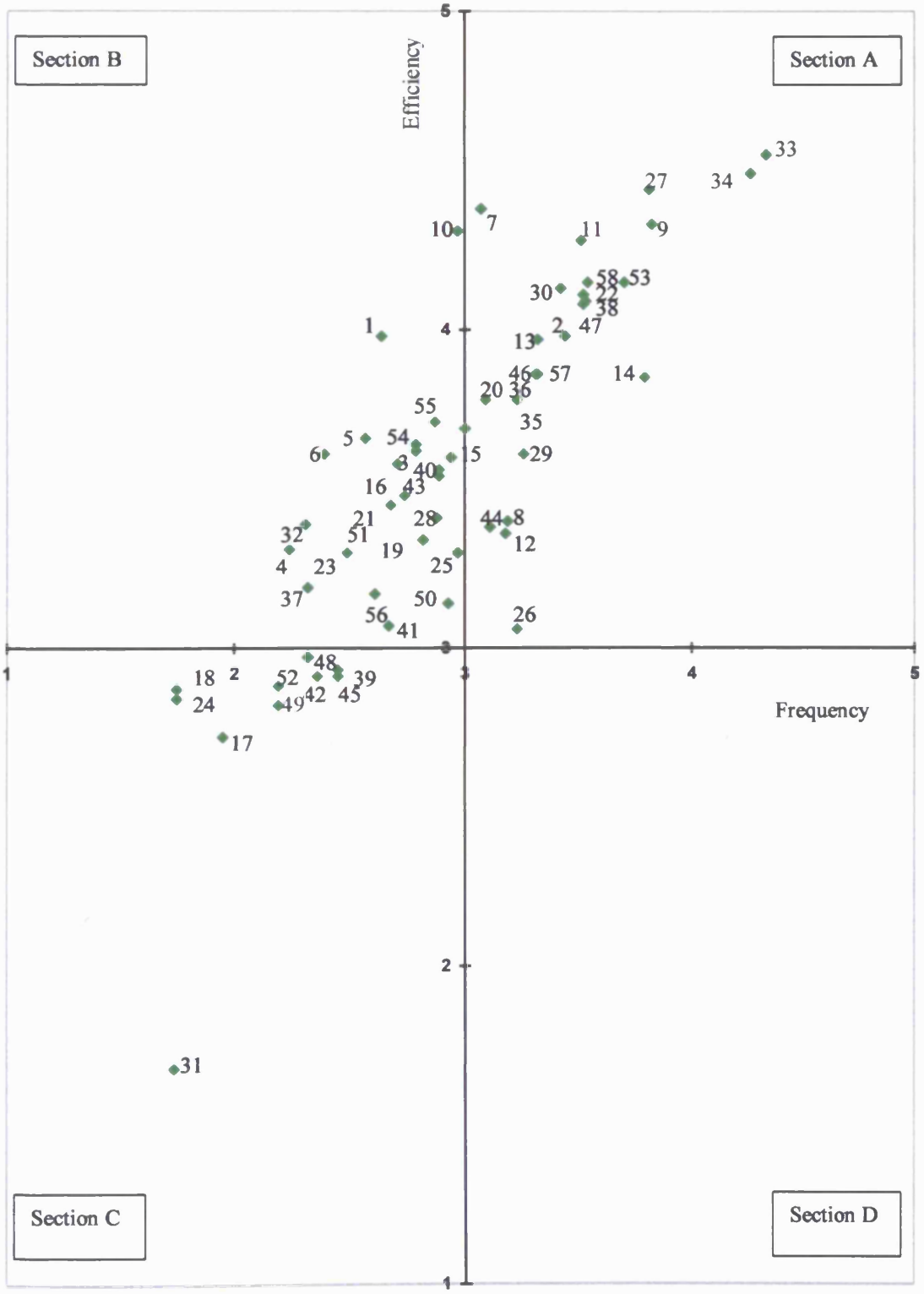


Figure 6.3: F-E model of vocabulary learning strategies of British learners of French



With some caution and regardless of the difficulties in comparing similarities or differences between the three groups for every single item, the classification of the 58 items according to the relationship between frequency and efficiency provided several insights listed as follows:

(1) For all of the three groups, there was no item which was used frequently but was considered inefficient. Items regarded as inefficient were rarely used by the students.

(2) The three figures revealed that, overall, CE had a very different F-E model from the two British groups. This F-E model may be seen as a basis when interpreting subjects' responses to the open-ended questions as will be discussed in 6.2.3, and the interview data in Chapter 7.

(3) The three figures are supported by the results of Factor Analysis later. They show that Chinese students' beliefs of vocabulary learning strategies are quite consistent. They share a more fixed and stronger belief of the ways that vocabulary should have been learned. In contrast, British students present extreme beliefs of the vocabulary learning methods: some can be extremely useful and used, and vice versa.

6.2.2 Mean differences through a one-way ANOVA analysis

A 95% Confidence interval for the mean scores was set up, and two-tailed tests were used to find a difference in means among the 3 groups regardless of the direction of the differences. Means, F-ratio, and Probability (p) values of frequency and efficiency by the overall subjects were then obtained. Asterisks will be used to distinguish different significant levels: '*' represents significance at the level of $p \leq 0.05$, '**' represents significance at the $p \leq 0.01$ level, and '***' at the $p \leq 0.001$ level. Such a system will be used consistently in this study. The more asterisks, the higher confidence level to reject a null hypothesis: the 3 groups of learners' beliefs of vocabulary learning strategies are the same.

The results of the one-way ANOVA analysis presented below show that there are many significant differences among the three groups, and the Scheffé post hoc analysis indicates where the differences lie. Table 6.2 is the summary of frequency

and Table 6.3 of efficiency. These results will be discussed in general before a more detailed examination of specific questionnaire items.

6.2.2.1 There are differences of use between the three groups

Table 6.2 gives a clear indication that the three groups of learners are, in general, significantly different in the frequency of their use of different methods for learning vocabulary. Furthermore, the general impression obtained from the results of the Scheffé post hoc test is that more of the differences lie between BM and CE (groups 1 and 2) and CE and BF (groups 2 and 3). Each shows 37 differences out of the total 58 methods listed (the spread of these is, of course, not the same), whereas the comparison between BM and BF (group1 and 3) show 33 differences.

Further, results also reveal that the majority of statistical differences lies between two groups rather than three groups. 9 items out of the first 24 items show significant differences of frequency across all the 3 groups. They are: *reading textbooks* (item 2), *listening to radio programmes*, *listening to native speakers*, *other learners*, and *teachers of L1* (items 6-9), *speaking to teachers of L2* (item 11), *watching TV programmes* (item 16), *reading vocabulary cards* (item 18), and *memorise words in dictionaries* (item 19). From item 25 onwards, Table 6.2 shows that only 4 items are significantly different across the three groups. *Checking pronunciation in a dictionary* (item 37) appears to be more frequent for CE. Whereas *getting information through the teacher* (item 27) and *taking notes with contextual information* (item 58) are more frequent for British groups (BM and BF). Interestingly, BM, along with CE, use *writing the word repeatedly* more frequently than BF.

Therefore, examining the column of the significance levels in Table 6.2, it is clear that the first 24 activities-based items have highly significant differences across all 3 groups. This is interesting: there are more differences of the 24 activity-based than the cognition-based vocabulary learning strategies between the 3 groups. This may result from the selection of the questionnaire items, as 24 items were generated from Chinese viewpoints (although with a different sample) by Cortazzi and Jin (1996a),

which may be similarly evaluated as the most frequently used methods by the CE group in this study. Therefore, this part of the questionnaire tends to be culturally specific. The remaining 34 questionnaire items were chosen from a wider range of research studies conducted in different cultural contexts (Ahmed 1989; Cohen 1990; Cohen and Aphek 1980), which seems to generate fewer statistical differences among the 3 groups.

Moreover, due to the sampling of this study, it is clear that CE and BF are generally more advanced in their learning experiences of L2. They are presumed to access authentic materials with natural daily-life use of language more frequently than the BM group, who generally have lower proficiency. Table 6.2 clearly shows this trend judging from *reading newspapers/magazines*, *literature*, and *non-fiction*; *listening to radio programmes*, and *watching films and TV programmes*. This trend would imply that for these items the significant differences lie between groups BM & CE and BM & BF but not CE & BF.

However, for the activity of *watching films/video cassettes* (item 15), the post hoc test reveals that there is no significant difference between groups BM and BF. These two groups do not use this method as frequently as CE. Also, on items 6 and 16 regarding media facilities, there are also significant differences in the frequency of use between groups CE and BF. Moreover, the BM group may depend more often on audio cassettes which are normally designed for different levels of learners. They also tend to mainly rely on the classroom environment to learn the target language, this accounts for a higher frequency of *use of textbooks* (item 2), *speaking to teachers* (who may be native speakers), and *other learners* (items 7-12).

Nevertheless, the differences in the years of learning experience may not be the main factor to explain the use of vocabulary learning methods. That is, it still can not explain clearly the following problems.

(1) Why are there similarities between BM and CE, when their years of learning experience are so different?

Table 6.2: ANOVA of Frequency of use of vocabulary learning strategies among 3 groups

		BM(1)	CE(2)	BF(3)	F-ratio	Sig.	Scheffé post hoc test		
read L2	1. newspapers/magazines	2.18	2.61	2.64	8.19	***	1&2	1&3	-
	2. textbooks	4.35	3.68	3.44	27.59	***	1&2	1&3	2&3
	3. literature	2.29	2.76	2.79	6.08	**	1&2	1&3	-
	4. non-fiction	1.85	2.18	2.24	5.14	**	1&2	1&3	-
listen to	5. audio cassettes	3.59	2.72	2.57	34.39	***	1&2	1&3	-
	6. radio programmes	1.65	3.14	2.39	100.90	***	1&2	1&3	2&3
	7. native L2 speakers	3.58	2.51	3.07	44.04	***	1&2	1&3	2&3
	8. other learners	3.54	2.62	3.19	38.25	***	1&2	1&3	2&3
	9. teachers of L1	4.36	3.32	3.82	48.56	***	1&2	1&3	2&3
speak to	10. native L2 speakers	3.26	2.48	2.97	27.84	***	1&2	-	2&3
	11. teachers of L2	4.15	2.83	3.51	78.88	***	1&2	1&3	2&3
	12. other learners	3.41	2.64	3.18	30.39	***	1&2	-	2&3
write	13. essays, compositions	3.21	2.86	3.32	15.70	***	1&2	-	2&3
	14. taking notes	3.95	2.91	3.79	77.02	***	1&2	-	2&3
watch/ read L2	15. films/video cassettes	2.73	3.31	2.94	17.01	***	1&2	-	2&3
	16. TV programmes	2.26	3.35	2.71	52.24	***	1&2	1&3	2&3
	17. cartoons/comics	1.80	2.91	1.95	88.58	***	1&2	-	2&3
	18. vocabulary cards	3.10	2.42	1.75	62.66	***	1&2	1&3	2&3
memorise	19. words in dictionaries	2.26	3.08	2.82	20.41	***	1&2	1&3	2&3
	20. words in vocabulary books	4.14	2.99	3.09	44.53	***	1&2	1&3	-
	21. words in categories	2.94	2.64	2.74	2.61	-	-	-	-
use	22. translating/interpreting	3.75	2.89	3.52	43.60	***	1&2	-	2&3
	23. word formation	2.88	2.61	2.49	4.36	*	-	1&3	-
	24. vocabulary games	1.75	2.31	1.75	28.43	***	1&2	-	2&3

1 – 5: nerver - rarely - sometimes - often - always; BM (1)=British learners of Mandarin; CE (2)=Chinese learners of English; BF (3)=British learners of French; Sig.=F Probability; Sig.: * F Prob. ≤ 0.05; ** F Prob. ≤ 0.01; *** F Prob. ≤ 0.001; -: not significant

Table 6.2 (continued): ANOVA of Frequency of use of vocabulary learning strategies among 3 groups

		BM(1)	CE(2)	BF(3)	F-ratio	Sig.	Scheffé post hoc test		
get info. through	25. my classmates	2.99	2.78	2.97	4.15	*	-	-	2&3
	26. guessing from the context	3.28	3.14	3.23	1.50	-	-	-	-
	27. the teacher	4.11	3.35	3.81	34.25	***	1&2	1&3	2&3
	28. L2 paraphrase	2.85	2.97	2.88	0.99	-	-	-	-
	29. L1 equivalent	3.47	3.20	3.26	2.66	-	-	-	-
	30. examples of use	3.91	3.29	3.42	17.12	***	1&2	1&3	-
	31. paying no particular attention	1.66	2.66	1.74	86.94	***	1&2	-	2&3
use a dictionary	32. a monolingual dictionary	2.07	2.84	2.31	22.25	***	1&2	-	2&3
	33. a bilingual dictionary	3.37	3.30	4.33	76.65	***	-	1&3	2&3
	34. to look up the meaning	3.58	3.72	4.26	36.21	***	-	1&3	2&3
	35. to look up the derivation	2.38	3.17	3.00	16.72	***	1&2	1&3	-
	36. to look up grammatical info.	2.41	3.23	3.23	22.08	***	1&2	1&3	-
	37. to check pronunciation	3.01	3.40	2.32	80.39	***	1&2	1&3	2&3
	38. for examples of use	2.93	3.41	3.53	9.99	***	1&2	1&3	-
memorise/ practise through	39. creating a mental image of the word	3.28	3.13	2.45	36.11	***	-	1&3	2&3
	40. associating it with other keywords	3.36	3.32	2.89	16.53	***	-	1&3	2&3
	41. associating it with an L1 word with a similar sound	1.91	2.61	2.67	14.88	**	1&2	1&3	-
	42. word analysis (root, prefix, suffix)	2.74	2.90	2.36	19.96	***	-	1&3	2&3
	43. grouping with other L2 words of similar meanings	2.89	3.12	2.89	5.40	**	-	-	2&3
	44. visualising spelling in my mind	3.37	3.27	3.11	2.88	-	-	-	-
	45. dividing it into parts by meaning	2.81	2.93	2.45	17.13	***	-	1&3	2&3
	46. linking it to the situation in which it appeared	3.28	3.13	3.31	2.83	-	-	-	-
	47. using it in real situations or sentences	3.49	3.15	3.52	13.17	***	1&2	-	2&3
	48. writing the word repeatedly	3.88	3.27	2.32	83.25	***	1&2	1&3	2&3
	49. repeating the spelling aloud	2.96	3.16	2.19	58.45	***	-	1&3	2&3
take notes	50. by ordering words as met	3.34	2.73	2.93	10.45	***	1&2	1&3	-
	51. grouping words by meaning	2.66	2.91	2.68	4.73	**	-	-	2&3
	52. for pronunciation	3.01	3.13	2.19	68.05	***	-	1&3	2&3
	53. with L1 equivalent	3.81	3.19	3.70	20.90	***	1&2	-	2&3
	54. with L2 synonyms	2.66	2.96	2.79	3.73	-	-	-	-
	55. with both L1 equiv. and L2 synon.	2.81	3.07	2.87	3.29	-	-	-	-
	56. for word formation/derivation	2.71	2.76	2.61	1.62	-	-	-	-
	57. for grammatical information	3.62	2.94	3.32	18.32	***	1&2	-	2&3
	58. with a phrase, sentence, or context	3.99	3.06	3.54	36.09	***	1&2	1&3	2&3

1 – 5: nerver - rarely - sometimes - often - always; BM (1)=British learners of Mandarin; CE (2)=Chinese learners of English; BF (3)=British learners of French; Sig.=F Probability; Sig.: * F Prob. ≤ 0.05; ** F Prob. ≤ 0.01; *** F Prob. ≤ 0.001; -: not significant

(2) Why are there differences between BF and CE, when their years of learning experience are more equivalent?
(3) Why are there some learning methods which suit the BF group more, but which are also frequently used by BM rather than CE?

Arguably, the last two general questions show the need to discuss cultural factors (including academic culture) that influence the deeper level of beliefs of vocabulary learning methods. This may illustrate that the target language differences and the culture of learning, despite differences in learning levels, do have their role to play behind the 'iceberg' of the learners' learning strategies (Oxford 1996a). However, the first general question shows a need to also explore possible common factors in vocabulary learning strategies (see section 6.3).

6.2.2.2 Differences in beliefs

The overall impression from Table 6.3 is that the students' ratings of the efficiency of the 58 vocabulary learning methods is significantly different between the groups: 44 of the 58 items show such differences of beliefs. The post hoc tests reveal in general a varied spread of these significantly different beliefs about efficiency across the groups: there are 31 such differences between groups BM and CE, an impressive number of 40 differences between groups CE and BF, but only 19 items between group BM and BF are statistically different. These findings do not always concur with the common pre-conceived notions of cultural differences between British and Chinese learners. This point will emerge in the following sections that discuss the results between the three groups. The main differences are summarised later (in Table 6.7).

Interestingly, the numbers of significant differences regarding frequency and efficiency are dramatic between group BM and BF. Table 6.2 reveals 33 significant differences regarding frequency, and Table 6.3 shows only 19 significant differences between BM and BF for efficiency. Comparing groups BM and CE, numbers of differences

concerning frequency and efficiency slightly decrease. There are 37 significant differences regarding frequency and 31 regarding efficiency. Comparing groups CE and BF, numbers of differences between frequency and efficiency slightly increase. There are 37 significant differences concerning frequency and 40 concerning efficiency.

Although some items showing differences across the three groups for frequency do not always appear in the differences of efficiency, efficiency of *reading textbooks* and *listening/speaking to teachers of L2* remains significantly different across the three groups. Moreover, only 4 items (i.e. item 30, 33, 39, and 48) between 25-58 show significant differences across the three groups. *Writing the word repeatedly* remains significantly different for both frequency and efficiency of use, which is least emphasised by BF. While BF show significant differences in *using a bilingual dictionary*.

Overall, only a limited number of items showed differences of efficiency across all three groups; that is, there are more differences between pairs of the two groups. Further, greater differences were found between CE and BF, but fewer differences were found between BM and BF. This seems to confirm that most of the listed methods may be used differently (more likely) due to variables in culture, target language, and (slightly) because of years of the learning experience. The first two factors, above all, are a particular focus for this study. Each main category of these different beliefs about the efficiency of the various ways of learning vocabulary is further highlighted below.

There is a tendency of CE's mean scores for efficiency significantly lower than those of the two British groups. However, *using a dictionary to check pronunciation* (item 37), *repeating the spelling aloud* (item 49) and *taking notes for pronunciation* (item 52) remain significantly higher than the two British groups. These differences add validity to the cultural awareness of form-focussed learning indicated in frequency of use earlier.

Table 6.3: ANOVA of Efficiency of use of vocabulary learning strategies between 3 groups

		BM(1)	CE(2)	BF(3)	F-ratio	Sig.	Scheffé post hoc test		
read L2	1. newspapers/magazines	3.74	3.29	3.98	27.25	***	1&2	-	2&3
	2. textbooks	4.52	3.45	3.98	42.87	***	1&2	1&3	2&3
	3. literature	3.49	3.13	3.62	12.00	***	-	-	2&3
	4. non-fiction	3.31	2.84	3.31	12.13	***	1&2	-	2&3
listen to	5. audio cassettes	4.22	3.23	3.66	24.92	***	1&2	1&3	2&3
	6. radio programmes	3.51	3.65	3.61	0.39	-	-	-	-
	7. native L2 speakers	4.59	3.51	4.38	54.32	***	1&2	-	2&3
	8. other learners	3.55	2.98	3.40	12.01	***	1&2	-	2&3
	9. teachers of L1	4.65	3.64	4.33	51.83	***	1&2	1&3	2&3
speak to	10. native L2 speakers	4.58	3.46	4.31	50.97	***	1&2	-	2&3
	11. teachers of L2	4.64	3.47	4.28	65.11	***	1&2	1&3	2&3
	12. other learners	3.71	2.91	3.36	18.78	***	1&2	-	2&3
write	13. essays, compositions	4.29	3.46	3.97	21.69	***	1&2	-	2&3
	14. taking notes	4.00	3.35	3.85	17.48	***	1&2	-	2&3
watch/ read L2	15. films/video cassettes	3.71	3.60	3.60	0.27	-	-	-	-
	16. TV programmes	3.52	3.65	3.58	0.46	-	-	-	-
	17. cartoons/comics	3.26	3.28	2.72	16.51	***	-	1&3	2&3
	18. vocabulary cards	3.91	2.87	2.87	25.66	***	1&2	1&3	-
memorise	19. words in dictionaries	3.07	3.33	3.34	1.47	-	-	-	-
	20. words in vocabulary books	4.23	3.20	3.78	33.66	***	1&2	1&3	2&3
	21. words in categories	3.79	3.03	3.48	16.52	***	1&2	-	2&3
use	22. translating/interpreting	4.36	3.31	4.11	48.18	***	1&2	-	2&3
	23. word formation	3.83	3.00	3.30	16.11	***	1&2	1&3	2&3
	24. vocabulary games	3.39	2.87	2.84	5.78	***	1&2	1&3	-

1–5: useless-not so good-unsure-good-very good; BM (1)=British learners of Mandarin;CE (2)=Chinese learners of English; BF (3)=British learners of French; Sig.=F Probability; Sig.: * F Prob. ≤ 0.05; ** F Prob. ≤ 0.01; *** F Prob. ≤ 0.001; -: not significant

Table 6.3 (continued): ANOVA of Efficiency of use of vocabulary learning strategies between 3 groups

		BM(1)	CE(2)	BF(3)	F-ratio	Sig.	Scheffé post hoc test		
get info. through	25. my classmates	3.38	2.93	3.30	9.31	***	1&2	-	2&3
	26. guessing from the context	3.23	3.20	3.06	1.07	-	-	-	-
	27. the teacher	4.64	3.71	4.44	55.36	***	1&2	-	2&3
	28. L2 paraphrase	3.64	3.30	3.41	2.86	-	-	-	-
	29. L1 equivalent	3.87	3.24	3.61	11.72	***	1&2	-	2&3
	30. examples of use	4.50	3.71	4.13	20.48	***	1&2	1&3	2&3
	31. paying no particular attention	1.56	2.53	1.68	45.74	***	1&2	-	2&3
use a dictionary	32. a monolingual dictionary	3.06	3.42	3.39	2.39	-	-	-	-
	33. a bilingual dictionary	4.00	3.56	4.55	67.23	***	1&2	1&3	2&3
	34. to look up the meaning	4.24	3.89	4.49	31.12	***	1&2	-	2&3
	35. to look up the derivation	3.59	3.57	3.69	0.79	-	-	-	-
	36. to look up grammatical info.	3.30	3.59	3.78	5.00	**	-	1&3	-
	37. to check pronunciation	3.73	3.77	3.19	17.23	***	-	1&3	2&3
	38. for examples of use	3.87	3.79	4.09	4.88	**	-	-	2&3
memorise/ practise through	39. creating a mental image of the word	3.89	3.47	2.93	22.63	***	1&2	1&3	2&3
	40. associating it with other keywords	3.86	3.75	3.56	2.83	-	-	-	-
	41. associating it with an L1 word with a similar sound	2.54	2.90	3.07	4.73	**	-	1&3	-
	42. word analysis (root, prefix, suffix)	3.46	3.31	2.91	9.15	***	-	1&3	2&3
	43. grouping with other L2 words of similar meanings	3.59	3.57	3.54	0.08	-	-	-	-
	44. visualising spelling in my mind	3.63	3.47	3.38	1.27	-	-	-	-
	45. dividing it into parts by meaning	3.47	3.38	2.91	12.47	***	-	1&3	2&3
	46. linking it to the situation in which it appeared	3.71	3.53	3.86	5.39	**	-	-	2&3
	47. using it in real situations or sentences	4.32	3.71	4.08	13.10	***	1&2	-	2&3
	48. writing the word repeatedly	4.07	3.53	2.97	27.20	***	1&2	1&3	2&3
	49. repeating the spelling aloud	3.24	3.57	2.82	23.34	***	-	-	2&3
take notes	50. by ordering words as met	3.22	3.24	3.14	0.53	-	-	-	-
	51. grouping words by meaning	3.43	3.45	3.45	0.01	-	-	-	-
	52. for pronunciation	3.44	3.59	2.88	24.82	***	-	1&3	2&3
	53. with L1 equivalent	4.17	3.36	4.15	39.26	***	1&2	-	2&3
	54. with L2 synonyms	3.63	3.40	3.64	3.05	*	-	-	2&3
	55. with both L1 equiv. and L2 synon.	3.84	3.45	3.71	4.98	**	-	-	2&3
	56. for word formation/derivation	3.35	3.17	3.17	0.77	-	-	-	-
	57. for grammatical information	4.07	3.36	3.86	18.39	***	1&2	-	2&3
	58. with a phrase, sentence, or context	4.42	3.58	4.15	29.62	***	1&2	-	2&3

1–5: useless-not so good-unsure-good-very good; BM (1)=British learners of Mandarin;CE (2)=Chinese learners of English; BF (3)=British learners of French; Sig.=F Probability; Sig.: * F Prob. ≤ 0.05; ** F Prob. ≤ 0.01; *** F Prob. ≤ 0.001; -: not significant

With regard to reading, *reading non-fiction* is less used by CE, whereas BM and BF only show one significant difference in their emphasis of *reading textbooks*. In spite of differences in the level of proficiency regarding the target language, British students seem to have a stronger belief that reading is quite helpful for learning vocabulary. This is shown not only in academic learning differences but also in cultural learning differences, as Chinese students may be more passive regarding involvement in reading if it is not demanded in classes (e.g. Tsai 1997).

Moreover, the results of the perceived efficiency ratings for items of 6-8, 10 and12, whose macro-category is *listening* and *speaking*, show no differences among British learners (BM and BF). Most importantly, BM showed a more positive view towards efficiency of most of the contextual methods despite the fact that they may not be capable of dealing with the more advanced contextual input involved. There is some validity here, despite their lower levels and relative difficulty in accessing some means of learning, since in this BM group nearly all have reached fairly high levels ('A' level exams) in their learning of other languages.

Similarly, concerning *listening to native L2 speakers* (item 7), *listening or speaking to other learners* (item 8 and 12), and *getting information through classmates* (item 25) CE show distinctive differences to British learners. Chinese students obviously do not think that *listening* or *speaking* to fellow learners can be of any great help. Further, the activities of *listening* and *speaking to native speakers* and *teachers* (item 7, 9-11) are not valued as highly by CE as by British students. Therefore, this may explain some learners' attitudes to the distinctive features of British communicative language teaching approaches compared to Chinese traditional methods. Some Chinese students seem reluctant to engage in pairwork, believing they have little to learn from someone who is at the same proficiency level as they are (Cortazzi and Jin 1996b).

With regard to resources for memorising words, contrary to expectation, the Chinese students do not give this the highest evaluation of efficiency. In fact, concerning *memorising words in the dictionary* (which is widely regarded as a traditional Chinese method), there is no significant difference between Chinese and British students. However, it is also important to notice that among all of the strategies, the British do not put this strategy as a priority, but they still do not deny the possible efficiency of using so-called 'out of context' learning. Similarly, the *translation* strategy (item 22) which is again often seen as a traditional language learning method is in fact highly regarded as efficient by British rather than Chinese students (cf. Freeman 1999).

From items 25 to 58, there is an overall impression of the similarity shared by BM and CE, and BM and BF. BM and CE show little difference in *using dictionaries*, and *memorising*, whereas BM and BF clearly share closer beliefs in *getting information* and *taking notes*. The only extreme significant difference between BM and BF is regarding *taking notes for pronunciation* (item 52). There is also a similar emphasis in item 37, to *use a dictionary to check pronunciation*. Such differences probably result from the variable of the target language or combining years of learning experience with that of the target language, and the different nature of that target language, given the importance of learning to pronounce Chinese tones.

As for using dictionaries in Table 6.3, there is some similarity between BM and CE, apart from a different degree of emphasis on *using a bilingual dictionary* and *using a dictionary to look up meanings*. Also, BM and BF are similar despite the fact that BM need to *check pronunciation* more than BF do. Nevertheless, BF need to *check grammatical information* more than BM and CE do. Interestingly, CE, like BM, think that it is efficient to check pronunciation in a dictionary. This shows that it is not only relative beginners (like BM), who think pronunciation is important, but it may be the nature of the target language which constrains this factor. Such factors also influence CE since the two language systems are fairly different. As French and English are more similar regarding phonological systems, British students already have the advantage of

being easily able to recognise French pronunciation from written forms. Thus, checking pronunciation is not always necessary and important.

6.2.3 Results of open-ended questions

Students' responses to the open-ended questions, numbers 2 to 4, were analysed and presented in Table 6.4. The numbers of the subjects answering that item is divided by the total numbers answering that question to calculate percentages, so percentages are valid percentages applied in each group in order to select the top methods in each category. Question number 1 (regarding other methods apart from the 58 listed in the questionnaire) is omitted because students' responses to it were quite rare, so there is no further discussion here. Further, it may be seen from Table 6.4 that Chinese subjects had fairly low responses to open-ended questions compared to British subjects. Possibly, the Chinese respondents were not used to completing questionnaires or maybe they did not envisage other possible methods to write in open-ended items after the rather lengthy list of scaled items to which they have already replied. This may further support the notion of cultural differences of attitude towards questionnaire investigations which may result from less experience with research. However, the results are still valuable.

It is interesting to notice that the three groups of subjects' responses of the top three methods used most frequently all fall into sector A of the F-E models (Figures 6.1 - 6.3). This confirms the reliability of subjects' responses. It is also interesting that almost all of the most valuable methods (except *writing words repeatedly* for BM group) occur for the items listed in the front page of the questionnaire rather than on the other side. This is either because the layout of the questionnaire affects the response, or simply because the first 24 activities-based learning strategies are normally the items that students think about. This second possibility seems likely since these items had originated from free elicitations from a large pilot study with similar Chinese students (Cortazzi and Jin 1996a). If the latter assumption holds, then it may suggest that

Chinese vocabulary learning strategies for this group are more activity-based rather than cognition-based.

Surprisingly, all the three groups of students consider that *speaking to native speakers* is the most important method of learning vocabulary. This may show that the real use of lexis, especially when used productively in interaction with people is fundamental to learning vocabulary. Further, its importance may be due to their experience that the most frustrating moments are when they cannot bring to mind the words they want to use while speaking, so its importance stood out from other methods.

Table 6.4: Open-ended answers of the three groups

	CE	**BM**	**BF**
Teachers' recommendations (Top 3 choices)	Newspapers (37%) Radio programmes (35%) Speak to native (27%)	Vocabulary cards (60%) Audio cassettes (47%) Textbooks (31%)	Newspapers (67%) Radio programmes (58%) A bilingual dictionary (51%)
Most important method (1 choice)	Speak to native (43%)	Speak to native (37%)	Speak to native (46%)
Methods always used (Top 3 choices)	Radio programmes (41%) TV programmes (29%) Films (25%)	Speak to native (33%) Write repeatedly (31%) Textbooks (28%)	Speak to native (43%) A bilingual dictionary (43%) Listen to native (31%)

(valid percentages of each of the three groups)
CE: Chinese learners of English; BM: British learners of Mandarin; BF: British learners of French

Specifically, using media as learning resources were considered the most frequent methods for CE: this is different from the other two groups. This point corresponds with the result of the ANOVA analysis earlier (see 6.2.2), and the qualitative analysis in the next chapter. Both BM and BF wrote that learning words through *native speakers* was used most frequently. The differences between the two groups were that the former used *writing repeatedly* and *textbooks* more often, and the latter, *a bilingual dictionary*, which is noticeably recommended by BF teachers .

The methods mostly used by learners may not always be in accord with what they have heard from teachers' recommendations, although it is questionable whether the methods are indeed clearly recommended by their teachers. CE and BF obviously did not *read newspapers* as much as teachers would hope, and such a strategy falls in sector B of their F-E models (Figures 6.1 and 6.3), which showed that *reading newspapers* may be an efficient method, but these two groups of students who have learnt the target language for some years did not use it frequently.

Interestingly, all three groups regarded *speaking to native speakers* as the most important method. This may imply that foreign language learners have the same general learning target despite their cultural backgrounds or the nature of the target languages. This will be further exemplified in later discussion.

6.3 Results of the second part of the analysis

Starting from the factor analysis, and a reliability test, a main scale was set up by using the CE group as a reference point to further compare an underlying pattern difference between three groups of the subjects.

6.3.1 Differences of the main underlying factor

According to the results of Principal Component Analysis and Factor analysis, the three groups of the subjects' responses presented the first four generated scales in Appendix E for factors of frequency and for factors of efficiency. After examining the four factors, only the first factor was picked up for further discussion, since the other three factors are distinctively weaker. Table 6.5 shows the first frequency factor of the three groups and Table 6.6 the first efficiency factor of the three groups. The following section identifies the factor by considering the higher loadings over 0.6.[19]

[19] In order to simplify the components of each factor, the first trial was to extract the variables whose correlation was above 0.6, as there were far too many variables above 0.3 for CE. However, it was found that the other two groups, i.e. BF and BM did not show too many highly correlated loadings above 0.6, so 0.3 is taken as the final bottom-line to obtain a more objective picture for all three groups.

Table 6.5 shows the results of the frequency factor analysis of CE. This is the major factor within the students' responses to vocabulary learning methods, accounting for 30% of all the variance in item scores. This single strong factor shows that there is a single strong thread running through Chinese learners responses: a 'word retaining orientation factor'. In order they are: item 49 *repeating the spelling aloud* (.82), item 48 *writing the word repeatedly* (.82), item 53 *notes: with L1 equivalents* (.71), item 52 *notes: for pronunciation* (.69), item 51 *notes: grouping words by meaning* (.67), and item 47 *using it in real situations or sentences* (.64). This 'word retaining factor' seems strong enough to support Cortazzi and Jin's (1996a) analysis of the perceived central importance of vocabulary for Chinese learners of English and their proposed four-centred model which includes vocabulary as a major component. The ease with which a single strong underlying factor can be identified for the CE group also supports the strong impression that this group is more consistent and homogenous in its approach to emphasising a compact range of vocabulary learning methods, as shown in Figure 6.1.

Whereas a single dominant factor emerged for CE, BM's first and second factor only moderately account for 12.4% of the total variance. This is the main difference between the BM and CE, as this group showed two moderate response threads running through their answers. Factor 1 is 'Communicative interaction in classrooms orientation' shown in: item 8 *listen to other learners* (.82), item 12 *speak to other learners* (.78), and item 11 *speak to teachers of L2* (.69). Factor 2 (Appendix E) is *use of dictionaries orientation* including item 38 *dictionary: examples of use* (.77), item 36 *dictionary: look up grammatical information* (.73), and item 37 *dictionary: check pronunciation* (.69). Another loading which is also related is the item 35 *dictionary: look up the derivation* (.52). The first factor is unsurprising in view of BM's presumed much greater exposure to communicative methods than CE. The second factor ties in with the assumption that the nature of Chinese written characters requires attention to written words and their meanings; however, it contrasts with items displayed in Table 6.4 where it is the BF group who mention (bilingual) dictionaries.

Similar to BM, BF do not have a single strong factor. The first frequency factor of BF only accounts for 15.3% of the variance. Factor 1 is 'academic resource orientation' consisting of: item 5 *listen to audio cassettes* (.77), and item 2 *read textbooks* (.60).

Table 6.6 shows that the first efficiency factor of CE accounts for 37.2% of the variance, and this again appears to indicate that CE hold one main belief about the efficacy of the vocabulary learning methods (Table 6.6). Factor 1 is 'word retaining-by-note orientation'. There are many high loadings, in particular: item 58 *notes: with a phrase, sentence, or context* (.83), item 57 *notes: grammatical information* (.71), item 54 *notes: L2 synonyms* (.68), item 56 *notes: word formation* (.67), and item 55 *notes: both L1 equivalent and L2 synonyms* (.64).

BM's efficiency Factor 1 accounting for only 16.3% of the variance is 'semantic note-taking orientation': item 55 *notes with both L1 equivalent and L2 synonyms* (.86), and item 54 *notes with L2 synonyms* (.77).

Similar to BM, BF accounting for 14.9% of the variance did not have a strong first efficiency factor (see also Table 6.6). Factor 1 is 'language skills orientation' including: item 10 *speak to native L2 speakers* (.82), item 7 *listen to native L2 speakers* (.78), item 1 *read newspapers* (.71), and item 6 *listen to radio programmes* (.69).

To summarise, the general underlying factors seem to overlap at some points, but there are also some categories not shared between the three groups. Table 6.7 below overviews all the frequency and efficiency factors between the three groups, using the interpretative labels derived above.

These labels may imply one main emphasis of how three different groups of learners might be taught lexis in or out of class, and of how they perceive frequency and usefulness of the main principle. Examining this belief is a starting point to understand students' learning expectations when learning foreign language vocabulary, which is a basis to broaden or change their current beliefs of vocabulary learning strategies.

Table 6.5: The first factor of frequency of vocabulary learning strategies of the three groups

Variables of Frequency	CE	BM	BF
Eigenvalue	17.39	7.20	8.88
Percentage of data-set variance	30%	12.4%	15.3%
1. newspapers/magazines			
2. textbooks			.60
3. literature			
4. non-fiction			
5. audio cassettes			.77
6. radio programmes			
7. native L2 speakers			
8. other learners	.30	.82	
9. teachers of L1		.38	.36
10. native L2 speakers	.31		
11. teachers of L2	.31	.69	.49
12. other learners	.39	.78	
13. essays, compositions	.30		
14. taking notes			.45
15. films/video cassettes	.34		
16. TV programmes			
17. cartoons/comics			
18. vocabulary cards			
19. words in dictionaries	.31		
20. words in vocabulary books	.42		
21. words in categories	.35		
22. translating/interpreting	.31		.35
23. word formation			.56
24. vocabulary games			.31
25. my classmates	.30		
26. guessing from the context			
27. the teacher	.34		
28. L2 paraphrase	.39		
29. L1 equivalent	.46		
30. examples of use	.33	.42	
31. paying no particular attention			
32. a monolingual dictionary			
33. a bilingual dictionary	.52		
34. to look up the meaning	.41		
35. to look up the derivation			
36. to look up grammatical information	.34		
37. to check pronunciation	.33		
38. for examples of use			
39. creating a mental image of the word			
40. associating it with other keywords	.47		
41. associating it with an L1 word with a similar sound	.32		
42. word analysis (root, prefix, suffix)			
43. grouping with other L2 words of similar meanings	.57		
44. visualising spelling in my mind	.43		
45. dividing it into parts by meaning			
46. linking it to the situation in which it appeared	.56		
47. using it in real situations or sentences	.64	.36	
48. writing the word repeatedly	.82		
49. repeating the spelling aloud	.82		
50. by ordering words as met	.33		
51. grouping words by meaning	.67		
52. for pronunciation	.69	.38	
53. with L1 equivalent	.71		
54. with L2 synonyms	.57		
55. with both L1 equiv. and L2 synon.	.59		
56. for word formation/derivation			.34
57. for grammatical information	.52		
58. with a phrase, sentence, or context	.36		

Table 6.6: The first factor of efficiency of vocabulary learning strategies of the three groups

Variables of Efficiency	CE	BM	BF
Eigenvalue	21.59	9.42	8.65
Percentage of data-set variance	37.2%	16.3%	14.9%
1. newspapers/magazines			.71
2. textbooks			
3. literature	.36		.49
4. non-fiction			.43
5. audio cassettes			
6. radio programmes			.69
7. native L2 speakers			.78
8. other learners			
9. teachers of L1			
10. native L2 speakers	.38		.82
11. teachers of L2	.35		.38
12. other learners			
13. essays, compositions	.40		
14. taking notes			
15. films/video cassettes	.36		.32
16. TV programmes			.30
17. cartoons/comics			
18. vocabulary cards			
19. words in dictionaries		.39	
20. words in vocabulary books	.39		
21. words in categories	.35		
22. translating/interpreting		.33	.38
23. word formation	.32	.50	
24. vocabulary games		.39	
25. my classmates	.30		
26. guessing from the context			
27. the teacher	.56		
28. L2 paraphrase	.51	.38	
29. L1 equivalent	.45		
30. examples of use	.47		
31. paying no particular attention			
32. a monolingual dictionary			.40
33. a bilingual dictionary	.35	.32	
34. to look up the meaning	.42		
35. to look up the derivation	.32		
36. to look up grammatical information	.45		
37. to check pronunciation	.47		
38. for examples of use	.57		
39. creating a mental image of the word	.35		
40. associating it with other keywords	.57		
41. associating it with an L1 word with a similar sound			
42. word analysis (root, prefix, suffix)	.34	.38	
43. grouping with other L2 words of similar meanings	.33	.43	.33
44. visualising spelling in my mind			
45. dividing it into parts by meaning	.39		
46. linking it to the situation in which it appeared	.54		
47. using it in real situations or sentences	.41		
48. writing the word repeatedly			
49. repeating the spelling aloud	.36	.31	
50. by ordering words as met	.31		
51. grouping words by meaning	.49	.38	
52. for pronunciation	.41		
53. with L1 equivalent	.52		
54. with L2 synonyms	.68	.77	
55. with both L1 equiv. and L2 synon.	.64	.86	
56. for word formation/derivation	.67	.48	
57. for grammatical information	.71		
58. with a phrase, sentence, or context	.83		

Table 6.7: Summaries of the main frequency and efficiency factors of the three groups

CE		BM		BF	
F	E	F	E	F	E
Word Retaining	Word Retaining by notes	Communicative interaction in classrooms	Semantic note-taking	Academic resources	Language skills

F: Frequency factor; E: Efficiency factor

6.3.2 Reliability and statistic significance of the main learning scale between the three groups

Using the components of the main factor set up by CE, the largest sample among the three groups, a reliability test was used firstly, to see how consistent the responses were under each factor. Secondly, it was also used as a starting point to demonstrate the differences between Chinese and British learners. Appendix F shows the reliability results of frequency, and displays the ones for efficiency. However, a few items analysed by the factor analysis had low correlations with the total-item score,[20] so they were excluded from the final scales of the reliability.

CE have higher reliability scores compared to other two groups. One likely reason for this is that the first 24 items from the questionnaire originated from Chinese students (but not items 25-58). This reliability score might therefore imply a consistency of response across the Chinese learners. This seems to be the case even though the sample in this study is from Taiwan, whereas the first 24 questionnaire items were obtained from common responses of Mainland Chinese students (Cortazzi and Jin 1996a). This implies reliability across two different research studies. Besides, the variables of CE under this scale have higher correlations with each other. However, for BF and BM, most of the variables did not have strong relationships with each other in one factor, so some of the correlations were fairly low.

Overall, it seems to be clear that Chinese and British students have different underlying compound methods of learning vocabulary of both perceived frequency and perceived

[20] These were the items which correlations with total-item score were below .3. Item 50 was deleted from Scale 1 of frequency, and item 31 was deleted from Scale 3 of efficiency.

efficiency. Nevertheless, it is worth investigating whether the two British groups show similar underlying differences. The next section intends to further explore whether there are significant mean differences for the underlying variables in the scale.

From Appendix F, it is clear that Chinese students perceive few differences between these learning methods. In order to analyse this further, the researcher chose the items (before item 40) that achieve a reliability of .90 from the CE group (see Table 6.8 below).

Table 6.8: Selected items from the frequency scale

Frequency Scale 1		Correlation with (total-item score)		
Decontextual rote learning- note taking- contextual memorisation		CE (N= 288)	BF (N=246)	BM (N=70)
47	Memo/p: using it in real situations or sentences	.73	.44	.55
57	Take notes: for grammatical information	.68	.43	.28
54	Take notes: with L2 synonyms	.68	.51	.41
46	Memo/p: linking it to the situation in which it appeared	.67	.27	.42
43	Memo/p: grouping with other L2 words of similar meanings	.65	.27	.38
36	Use a dictionary: to look up grammatical information	.65	.30	.23
55	Take notes: with both L1 equiv. and L2 synon.	.64	.47	.51
52	Take notes: for pronunciation	.63	.34	.26
30	Get information through: examples of use	.61	.33	.33
49	Memo/p: repeating the spelling aloud	.61	.27	.28
53	Take notes: with L1 equivalent	.61	.28	.42
51	Take notes: grouping words by meaning	.60	.43	.37
48	Memo/p: writing the word repeatedly	.60	.19	.37
Reliability (all items): Alpha =		.90	.71	.71

CE: Chinese learners of English; BM: British learners of Mandarin; BF: British learners of French

With these 13 items, a further test for mean differences by a one way ANOVA and an independent t-test were conducted. Table 6.9 shows that the three groups show no statistically significant difference in the frequency of using these 13 items. This may suggest that in general foreign language learners have a tendency to use a similar combination of methods for learning vocabulary.

Table 6.9: ANOVA and t-test for the scale of frequency among the three groups

Mean				F-ratio	Sig.	Scheffé's Post-hoc		
	BM	CE	BF			BM & CE	BM & BF	CE & BF
S1	37.52	37.32	36.22	1.98	0.13	-	-	-

S1: Scale 1 -: not significant
CE: Chinese learners of English; BM: British learners of Mandarin; BF: British learners of French

A similar procedure was used to see the differences of the efficiency scale. Table 6.10 displays a simplified underlying pattern which achieves the reliability .90, and 9 items (before item 51 selected from Appendix F) were selected.

Table 6.10: Simplified efficiency scale

	Efficiency Scale 1 Notes for retaining	CE (N= 255)	BF (N=237)	BM (N=63)
57	Take notes: for grammatical information	.74	.45	.37
40	Memo/p: associating it with other keywords	.73	.42	.34
38	Use a dictionary: for examples of use	.71	.39	.36
46	Memo/p: linking it to the situation in which it appeared	.70	.32	.32
30	Get information through: examples of use	.70	.22	.50
47	Memo/p: using it in real situations or sentences	.69	.46	.46
55	Take notes: with a phrase, sentence, or context	.68	.43	.55
37	Use a dictionary: to check pronunciation	.68	.33	.37
34	Use a dictionary: a bilingual dictionary	.68	.24	.20
	Reliability (all items): Alpha =	.90	.64	.67

CE: Chinese learners of English; BM: British learners of Mandarin; BF: British learners of French

Table 6.11 below shows significant differences between the Chinese and two British groups in their ratings of efficiency for methods of learning vocabulary. This may suggest that Chinese students have an underlying belief in the efficiency of learning methods which differs from that of British students.

Table 6. 11: ANOVA and t-test for the scale of efficiency among the three groups

Mean				F-ratio	Sig.	Scheffé's Post-hoc [+t and p value]		
	BM	CE	BF			BM & CE	BM & BF	CE & BF
S1	35.95	32.89	34.89	8.68	0.000	[t = 3.75, p=0.000]	-	[t = -3.38, p=0.001]

S1: Scale 1 -: not significant
CE: Chinese learners of English; BM: British learners of Mandarin; BF: British learners of French

The results of students' beliefs of efficiency may imply ideal views of vocabulary learning strategies, and show no differences between BM and BF. This implies that British students (regardless of the target language) share similar beliefs of the ways of learning a foreign language.

6.4 Findings and discussion

Results from the above first analysis and second analysis have both shown two possible dimensions of vocabulary learning strategies. One is the culture of vocabulary learning strategies and the other is common vocabulary learning strategies.

6.4.1 There are cultural differences of vocabulary learning strategies

Findings that may reflect cultural differences are grouped in the following five orientations: (1) media orientation, (2) social orientation, (3) form/pattern orientation, (4) memorisation orientation, and (5) self-learning orientation. Discussions will be based on Table 6.2 only, since there is a high correlation-coefficient between *frequency of use* and *efficiency of use*. The former is chosen for summaries because, firstly, when students evaluate frequency, this is likely to reflect reality to a greater extent rather than an ideal, and is thus more valid in relation to behaviours. Secondly, there was consideration that few items that CE valued with higher mean scores of *efficiency of use* within the group, did not show any statistical differences when compared to BM or BF. In addition, some items may appear in the upper ranking of the CE's list but in the bottom list of BM's or BF's (e.g. item 16 *watching TV programmes* in Appendix D).

6.4.1.1 Media orientation

Regarding learning through *radio programmes* (item 6), *films* (item 15), *TV programmes* (item 16) and *cartoons/comics* (item 17), there is a distinction between British and Chinese students in general (Table 6.2). It is apparent that Chinese students use such facilities more often than British students. The main likely reason for this is due to the differences in opportunities to access such materials through public media. Of

course, there is also a caution concerning the Chinese respondents. Some Chinese students live in more remote provinces or rural areas, where TV or internet may be difficult to obtain, but radio and cassette players may still be popular, whereas in other areas like Taiwan (where the subjects of this study live), it is popular to get access to modern technologies, like CD-rom or internet learning, so students have similar institutional and personal access to more developed countries.

Further, it is clear that English is now an international language, and English films and programmes are popular in China, but Chinese films are not easily seen in Britain either in the cinema or on TV or in video format. So the opportunity of obtaining such facilities for CE can be greater, since English–language films are easily seen in Taiwan in the cinema or on TV (usually with subtitles). All in all, it seems to be reasonable to claim that there is differential access and practice to learning resources, native speakers, travel and the like.

Nevertheless, there is a need for a caution regarding this interpretation for the British participants learning French, as French films and programmes may not be too difficult to access in the UK as opposed to Chinese films and it is easy to travel to France from England as opposed to China. Moreover, British students, BF in particular, have luxurious resources (like videos or cassettes) provided by universities, but surprisingly BF show a low frequency of using such media (see also, Meara 1993). This may indicate that something beyond accessibility needs to be taken into account. In fact, it seems likely that British learners' learning habits based on modern facilities are (to some extent) just different from Chinese students.

6.4.1.2 Social orientation

Chinese students (CE) are different from both groups of British learners in terms of social interaction in classrooms (item 7-12). The British groups' (BM and BF) social interaction with people, including native speakers, teachers, or even other learners are

comparatively more frequent (and perceived as more efficient) than the Chinese group. These findings may reveal differences between the two different classroom cultures. Chinese classrooms tend to be teacher-centred, with little one-to-one interaction with peers. Students would quite likely, therefore, expect to learn more from their teachers rather than their peers (see Chapter 4). This is different from the apparent British style; communicative language teaching methods originated in large part in Britain and they fit into a general development of learner-centred approaches – both factors would encourage classroom interaction including pairwork with peers.

In spite of the argument that there are some cultural differences in listening or speaking to other learners, this questionnaire investigation shows that peers are not necessarily the information-providers, as the mean scores rated by the 3 groups were all revealed to be low. In fact, it seems that L2 learners rarely use other learners to obtain information when learning new words. Besides, only a slight difference exists between the mean scores of CE and BF. Instead, teachers are considered as important information providers among all three groups, and are also the most frequent resources among all the listed ways of 'getting information' (items 25-31). But here the mean score of BM is fairly high resulting in a significant difference among the three groups. Accessing examples of use is also regarded important for the three groups of learners, and the emphasis of BM is particularly strong in this category.

6.4.1.3 Form/pattern orientation

It is interesting to find that the target language as a variable plays an important role affecting the ways in which learners learn vocabulary, although some influence remains consistent in L2 learning. Items 37 and 52 in Table 6.2 indicate that BM, more like CE, focus on learning pronunciation, which is distinctively different from BF. Further, CE show a stronger tendency to learn word forms (items 35, 36 and 42). BM also show a significant tendency to use word formation (item 23) compared to BF.

However, it is worthwhile to note the conflicting results of BM between items 36 and 57: BM rarely check *grammatical information in a dictionary* but often *take notes of grammatical information*. However, it is not common for Chinese dictionaries to include information about grammar. Also if students have taken notes from elsewhere then they possibly do not need to rely on a dictionary.

Although there is no clear indication whether BM will eventually be less form focussed concerning vocabulary learning as BF are, BM do show more similarity with BF than with CE regarding their *use of translation and interpretation* (item 22). It is clear that British and Chinese learners show a distinct difference in using these learning methods. BM often use translation and believe it is very efficient; this could be interpreted to be a traditional practice which runs counter to communicative methods. It is uncertain why CE think otherwise. Is it because most of Chinese respondents have reached near native-levels, so that conscious translating practice is not necessary? Is it because translation is just not emphasised in current classrooms? Or is it because learners are told that translation is an old fashioned method, which is not favoured by modern communicative language teachers and that learners' awareness of current trends constrains their responses? But the English also use this method, so if this last question was the case, then surely they too would not use translation.

6.4.1.4 Memorisation orientation

It is interesting to notice that there are few differences between CE and BM concerning the memorising strategies (items 39–49). Rather, more differences were found between CE and BF, and between BM and BF. That is, in many aspects, BM have similar ways of *memorisation and practice* to CE; as Table 6.2 shows, there are no differences in *creating mental images* (item 39), *associating keywords* (item 40), *analysing words* (item 41), *visualising words in the mind* (item 44), *dividing a word into parts by its meaning* (item 45), *linking the word with situations* (item 46), and *reading repeatedly aloud* (item 49). Moreover, both groups put great emphasis on *writing repeatedly'* (item

48), despite the fact that there is statistically a significant difference. Such features may show a uniqueness in learning Chinese, since L1 Chinese speakers have brought these characteristics to learning English, and BM may need to adopt these methods.

6.4.1.5 Self-learning orientation

Although CE comparatively should be more advanced learners, they rarely *write essays*, *take notes*, and *speak and listen to other learners*. They even incline towards more negative views on the effect of speaking to peers. This, again, shows that Chinese students hold a traditional Chinese learning belief towards classroom methods, which includes a teacher-centred teaching style, and is less independent or learner oriented. Possible reasons for the perception that CE rarely write essays may include the fact that there few native speaking teachers available to teach writing. However, students report that they find Western teachers are sometimes less effective than Chinese teachers (Cortazzi and Jin 1996c). A more likely reason is that the levels of written English required in the college syllabus are considerably less than reading (Cortazzi and Jin 1996b).

Apparently, according the result of item 31, learners rarely ignore or skip a new word, although CE shows a significantly highest mean score than the other two groups. The reason is not straightforward to interpret, but it may be because most CE have higher English proficiency at this stage of university study compared to the other groups. Or most of them only need to read English for academic purposes, such as reading reference books in English. Therefore, there is less need for them to focus all the new words they encounter. On the other hand, it is also likely that CE in fact are more dependent learners when learning vocabulary, so when there is no specific need to learn new words, they may not make too much effort to do so (Tsai 1997).

Dictionaries are indispensable tools for learning foreign languages. When students use dictionaries, they may refer to them for different functions or purposes. From Table 6.2,

it is obvious that all three groups of learners *use a bilingual dictionary* quite often, rather than a *monolingual* one. BF in particular, show the highest significant differences in comparison with the other two groups. Bilingual dictionaries may be used for *looking up meanings* (item 34) for the 3 groups, but BF show a significant difference in frequency of usage from the other two groups, whereas CE also focus on *checking word forms* (items 35-36). It is interesting that BF rely more on bilingual dictionaries than BM, as dependency on dictionaries would normally be assumed to be inversely proportional to their years of learning a foreign language, but might equally be related to particular contexts (e.g. reading different literary texts). However, there may be target language differences here: possibly using a Chinese dictionary is in fact more difficult than using a French or English one, and there is still a limited number of well designed Chinese dictionaries for foreign language learning purposes. Chinese dictionaries have only recently adopted an alphabetic order system (mainly for *Pinyin* but also for *Zhuyin Fuhao*), and of course, to use this, a learner has to know the pronunciation of a character before looking up the words. Clearly, for reading purposes, characters are frequently encountered whose pronunciation cannot be known by the written form of the character, even taking phonetic elements into account. Therefore, even with modern dictionaries, learners often have to avail themselves of the stroke order or radical system of locating words. This is often cumbersome and time-consuming. So it would not be surprising if the BM group used dictionaries less frequently than BF group, for whom it is a relatively simple matter to locate a target word in a dictionary. Consistent with this explanation are the very high mean scores for frequency and efficiency for BM to 'memorise words in vocabulary books', where useful words are arranged and sequenced in relation to target text materials; this memorising reduces time needed with a Chinese dictionary. Furthermore, according to the contrastive results of items 30 and 38, it is likely that a lack of examples of use may be another reason that BM show a very low frequency of looking up words. It is worthwhile noting that there is a very low frequency of using a dictionary for the purpose of finding examples of usage of a word in the BM group. This may be due to the fact that the types of dictionaries on the market

for this group of learners rarely match learners' need to see examples of use. Compared to the design of English dictionaries, Chinese dictionaries still tend to give meanings, rather than examples of words in sentences (e.g. Oxford Concise English-Chinese Chinese-English Dictionary (1986), compared to, say, an EFL example like the Oxford Advanced Learners' Dictionary 6th edition (2000)).

With regard to the methods of *taking notes* (item 14, 50-58) in Table 6.2, however, more differences are found between CE and BF, and between CE and BM. Fewer significant differences were found between BM and BF. Two higher mean scores of CE are to *take notes with L1 equivalent* (item 53), and *for pronunciation* (item 52), which are very different from BF. Besides, although BM and BF have a significant difference in item 52, the mean score of BM indicates that this is not the most important note-taking method. Instead, for BM, the most important part of taking notes is related to *phrase,* or *sentence* level and to *context* (item 58). Taking writing habits (items 13 and 14) into account, British students in general use these techniques more than Chinese students. This may show that the former have developed such academic habits more than the latter, perhaps as an academic cultural difference.

6.4.2 Common vocabulary learning strategies

Despite the differences in the three groups because of the general proficiency level or cultural differences, there are some strategies which appear to show no difference of use at all among the three groups. In the learning processes shown in Table 6.2, the three groups as a whole did not often *memorise words in categories* (item 21), *get information from an L2 paraphrase* (item 28), *take notes with L2 synonyms* (item 54), *take notes with both L1 equivalents and L2 synonyms* (item 55)[21], or *take notes for word formation* (item 56). The post hoc tests also showed that there was no difference between the three groups when they tried to *get information through guessing* (item 26) or *through L1 equivalent* (item 29), *visualise spelling in mind* (item 44), *link words to*

[21] CE showed a slightly higher mean of using this strategy when taking notes.

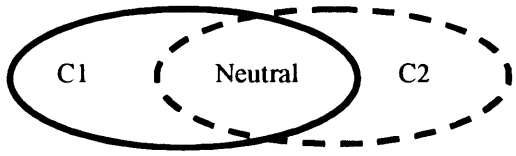
the situation where they appear (item 46), and *get information through an L2 synonym* (item 54) or through *an L1 equivalent* (item 55). Among all these strategies, it is interesting that there is in fact no statistical difference when evaluating for some contextual, decontextual, or memorising-based strategies. There are some strategies which are not apparently affected by any variables; they seem more universal across these groups.

Obviously there are large numbers of significant differences in frequency of use and in efficiency of use across the three groups. But there are also a few common methods which are (and others which are not) often used and regarded as efficient; this shows a 'common' tendency.

Overall, this study has identified that culture and target language are two of the main factors which influence ways of learning, although there is still a danger in generalising: the fixed pattern of culture A will learn in this way, and culture B will learn in that way without a mutual comparison. Based on the above results, it is important to note that favouring particular methods may not be straightforward, as the points made above about dictionary use show. Firstly, the questionnaire only recorded students' beliefs or ratings of these methods, so there are reservations about the extent to which these scores might match any actual behaviours of learning vocabulary. Secondly, these scores may result from a mix of learners' proficiency level, academic culture, culture of learning and L1 learning experience. If so, this would leave an analytic problem of how to separate these factors.

From the results of an ANOVA and factor analysis, a Venn diagram of vocabulary learning strategies can be derived (Figures 6.4). This illustrates that language learners may adopt methods to learn the target language which are more suitable for learning the particular language. Furthermore, those particular methods adopted may not always result from the nature of their L1 learning experience. On the other hand, some strategies from the L1 learning experience may also transfer to learning of the L2.

Figure 6.4: Venn model of vocabulary learning strategies



C: Culture of learning

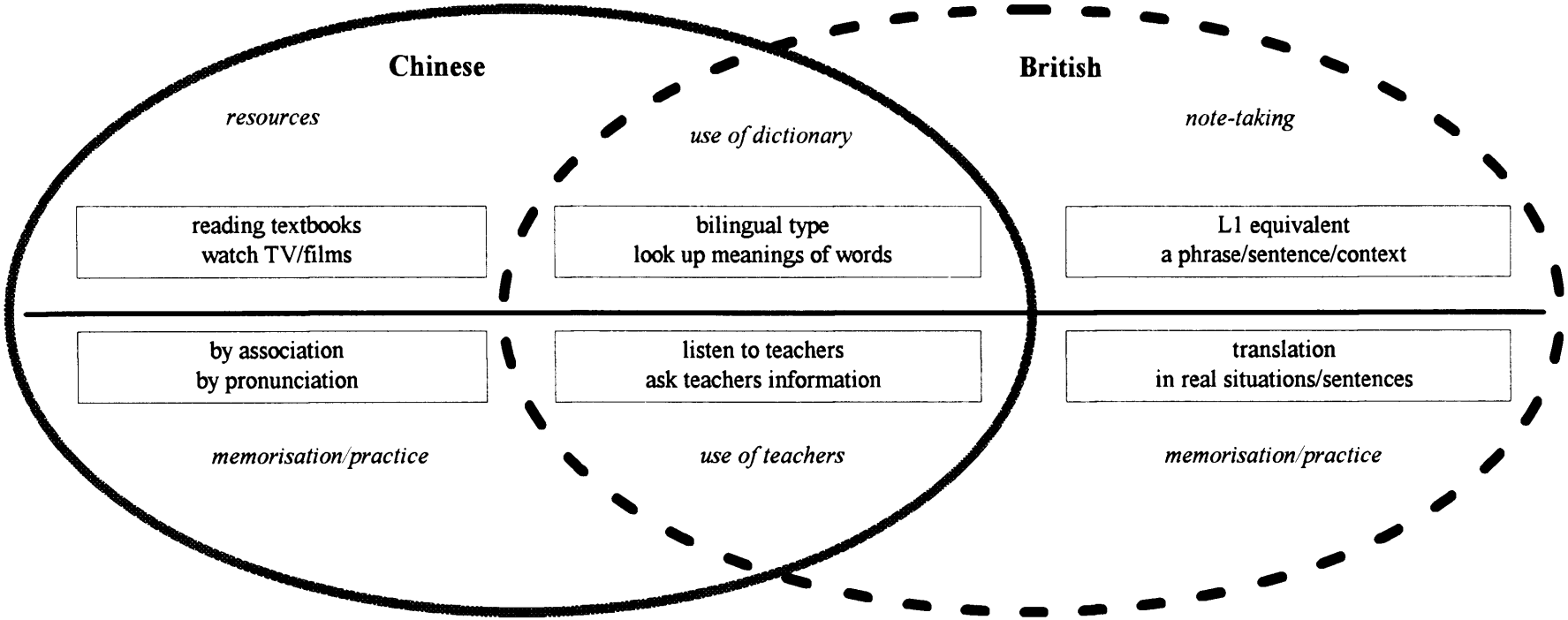
To expand the Venn model of Figure 6.4, Figure 6.5 shows the most common methods for learning vocabulary used by the Chinese and British students (see Appendix D). The Figure is useful to show that these are overlaps between these most common strategies. This is important because much of this research has concentrated on significant differences. However, these overlaps are also brought to light here.

6.5 Summary and conclusions

This study has explored the differences in students' beliefs towards vocabulary learning strategies and their possible compound strategies through different statistical analyses. Methods of analysis started from the first stage of descriptive statistics, correlation coefficients, and ANOVA statistics for the discrete 58 individual items. Then the second stage of analysis employed a factor analysis, reliability scores, ANOVA and t-tests to show differences of the three groups regarding underlying factors.

The first part of the analysis dealing with the 58 discrete items showed that there were differences that may result from a deeper level of cross-cultural factors. From Factor Analysis, the 58 items of vocabulary learning strategies have been categorised into a main general vocabulary learning scale. On the one hand, this main learning shows similar patterns. That is, in general, L2 learners, of several backgrounds, use contextual and decontextual methods, dictionaries, notes, communicative input and output, and memorisation for vocabulary learning. In fact, such features are within the framework of the 2C-5R model of vocabulary learning strategies set up earlier (Chapter 3).

Figure 6.5. A Venn diagram of common vocabulary learning strategies between Chinese and British students: constrastive top methods



On the other hand, it is also clear that the main general vocabulary learning scale of the three groups reveals different kinds of complexity. Some aspects of this complexity may be difficult to interpret in terms of the 2C and the 5R. In addition, some complexity may also show that general learning strategies are not as fixed as the listed questionnaire items might suggest; this was difficult to see from the first part of the analysis. Taking this complexity into account, it might imply the vocabulary learning is not a matter of single strategies listed as separate items. That is, the questionnaire design does not suggest that combination of strategies might be used, since respondents were asked to evaluate items singly one-by-one. The factor analysis for the Chinese group did not indicate clear underlying factors, which might have been taken as a combination of strategies. This indicates that vocabulary learning is neither this single strategy, nor that single strategy, in isolation. But it is notable that the Chinese subjects' evaluation of the 58 items was different from those of the British subjects.

Nevertheless, this complexity may imply not only that learners' vocabulary learning strategies are used in various ways, but that they may have lacked organisation due to some variables which were not clear-cut among the Chinese subjects, and were weaker factors among the British students. This may be because the respondents lacked awareness of classifying vocabulary learning. But this may also be due to a weakness of the Phase I study which did not specifically focus on real words, so that respondents might have considered as wide a range of learning methods as possible. So it is not yet clear whether learners might organise their learning more distinctively if specific words had been provided. However, this is expected to become clearer from Phase II, when specific examples of words are provided (Chapter 9).

Despite the complexity appearing in the three groups' responses, it can be concluded that British learners show more individual styles of learning. Chinese learners have a more consistent selection of vocabulary learning strategies, with stronger agreement for

a single factor. The main difference between British and Chinese learners is that the former tend to be more individual and varied in terms of both frequency and efficiency of use. British learners appear to be more liberal concerning their uses and beliefs of vocabulary learning strategies. Chinese learners seem to have more fixed and identical points of view on vocabulary learning strategies. As suggested by Figure 6.1 the Chinese learners as a group give very consistent F-E ratings.

Furthermore, the reliability test showed that BF and BM did not always have a stronger reliability score among the four factors compared to the ones of CE. It may be concluded that the results of CE, comparatively, were more consistent and accurate. But it is important to recognise that as the criteria of selecting the four scales was set by using by CE, the criteria may not be applicable to the other two groups.

It is important to be cautious in further research and ethnographical research studies when cross-cultural comparisons are considered. That is, to choose one particular group as a criterion group may involve an element of bias due to cultural differences. Moreover, this study may have shown that there are cultural differences in answering questionnaires. Therefore, although quantitative methods may provide accurate statistics, it remains difficult to solve such problematic aspects. It is worth remarking in this context that many research projects focussing on Chinese subjects have used Western questionnaires, with some danger that cross-culturally the Chinese are seen as different, even deficient, in comparison. In this study, the questionnaire is partly Chinese in origin, so any cultural bias will at least be a counter weight to other research. Much of the research in Bond (1996) is similarly viewed as balancing previous bias.

In addition, investigating vocabulary learning strategies across cultures may not be complete without combining some other objective means. The next chapter will consider learners' beliefs of learning strategies by means of interviews, which will illustrate and expand the questionnaire results.

CHAPTER 7

QUALITATIVE ANALYSIS OF INTERVIEW DATA

7.0 Introduction

When describing the methodology of this study, Chapter 5 has mentioned the reasons for conducting interviews, and the structure of the interview. This chapter focuses on the process of analysing the interview data and discusses the results.

There is perhaps no clear-cut point where qualitative data analysis may start. But in general, such research is divided into two stages: before and after data collection. This chapter has suggested that the two stages interact (e.g. Miles and Huberman 1994), because as soon as some samples have been collected, researchers tend to carry out a preliminary analysis and may modify subsequent interviewing. Nevertheless, for a full formal analysis it is better to wait until completing all the interviews, as this may 'avoid imposing meaning from one participant's interviews on the next' (Seidman 1991: 86). Some researchers like Wolcott (1994) prefer to start the analysis stage after completing transcription of interviews. He prefers to consider the whole qualitative analysis process as a "transforming" process, consisting of description, analysis, and interpretation.

In this study, the analysis stage started from tape-transcription after collecting all the interview data before moving on to code the data and finally to interpret the results. It firstly discusses methods of data analysis: handling transcriptions, coding and classifying. Then it presents the data obtained from CE and BM. The general criteria of arranging data will consider the questionnaire macro headings, together with the given headings that are suitable for the qualitative data *per se*.

7.1 Methods of Data Analysis

There is general agreement on the basic interview techniques used in educational or applied linguistic research concerning what the interview method is, the reasons for

using it, how to interview successfully, and in providing guidance for the interview process. However, there are fewer guidelines in the research handbooks regarding interview data analysis, discussion and interpretation. Perhaps this is because there is no single or best advice suitable for the range of various research purposes for which interviews are used (Seidman's 1991; Coolican 1994).

Nevertheless, there are some principles for the stages of transcribing, describing, coding, data displaying, categorising, connecting, and drawing conclusions (e.g. Dey 1993; Flick 1998; Miles and Huberman 1994; Strauss and Corbin 1990). This study follows the three stages of: (1) transcribing, (2) coding and classifying data, and (3) obtaining findings and discussion.

7.1.1 Record transcriptions

The first step of data analysis was to transcribe the content. The details of the content were noted down using the participants' words, unless content was irrelevant to the topic of the research, or was unrecognisable through the tape quality or because of ungrammatical sentences.[22] Backchannels and discourse markers like 'ums' were considered important when they followed silence or *I don't know*, because they may reflect that speakers' thinking had been difficult to express, or that they did not really know how to respond to the question immediately; it is likely that some of the vocabulary learning methods were not consciously noticed by participating students or were not easy to describe orally or spontaneously. All the transcriptions were typed into a word-processing programme in order to facilitate classifying data afterwards. All initial transcripts were checked by an English native speaker to ensure transcription accuracy. Further, the final coding version and transcription were further checked by an experienced researcher in Applied Linguistics and Education.

[22]As mentioned, when interviewing CE, English was used in the interview process, so there were some grammatical mistakes.

7.1.2 Classify data by coding

The coding process is considered very important, as Coffey and Atkinson (1996) indicate. It is a process of organising, managing, and retrieving the most meaningful bits of the data. They characterise this process as one which "enables the researcher to identify meaningful data and set the stage for interpreting and drawing conclusions" (ibid.: 27). As for the ways of coding, Bogdan and Biklen (1992) include some eleven types of coding categories as *coding families* (see ibid.: 165-172, for details of developing coding categories). Tesch (1990) further proposes the concept of decontextualisation and recontextualisation as an alternative to "coding", as used by most researchers. When decontextualising, the data are divided into segments which will be meaningful and comprehensible. Then all these segments are recontextualised by making connections between them. However, a possible weakness is that such categories are subjectively decided in advance by the researcher, "rather than let them develop from the experience of the participants as represented in the interviews." (Seidman 1991: 101)

Tesch (1990) points out the need to mix different methods of analysis. He said:

> "many researchers read only certain authors and remain quite ignorant of analysis purpose and procedures different from the ones their favourite methodological writers describe. This state of affairs is the result of an outdated belief that there exists only one qualitative method. We have reached a new stage in the development of qualitative research. The plurality of ways has been recognized."(p. 115)

This plurality includes some other ways of analysis to deal with raw data by keeping the data as a whole to analyse them from within. There are, for example, uses of narrative analysis, which analyse data in story form with common elements in the discourse structure (e.g. Cortazzi 1993; Milroy 1987; Mishler 1986). In particular, Mishler (1986) believes that interviews are speech events and interviewers and interviewees jointly construct the discourse of interviews. Therefore, a contextual interpretation is important in analysing such data, if only to attempt to ascertain the nature of any mutual construction. After checking the transcripts with this point in mind, this is believed to

have been minimal in the present study, perhaps due to the nature of group interviews within limited time.

Considering the strength and weakness of the above methods of analysis in qualitative research, the researcher firstly re-read the original transcriptions many times in order to identify major content or topic categories, to generate common categories and patterns, to group further (including sub-grouping), and to give priority to constantly explore the interviewees' own likely interpretations, intentions and meanings there and then. During the process of reading, the researcher found that one participant's description was sometimes different in nature from another: one could give a more process-oriented description where another one might offer a quicker answer in a simple sentence. This was a cause of trouble in coding the data, as using one category throughout all the data is likely to lose one aspect or another. Therefore, the coding in this study cannot be mechanical to mark through all the data using a single method. Rather, it seems to be necessary to consider each response separately and then judge it on the merits of its own apparent interpretation to code it.

The data were initially coded based on the macro-categories of topics of the questionnaire (Appendix B). Analyses of the transcribed interview data coded the main themes, key concepts, or patterns by cutting, moving and pasting conceptual units of ideas and text on the word processor. Major principles in doing this were to use participants' actual words and their probable intended meaning as much as possible.

At this stage, the researcher tried not to lose original paragraphs in the full tape transcription which were discussion-oriented and full of interviewer-interviewee interaction, or among group interviewees to discuss any unique meanings derived from the overall contexts. This was the stage in which a second transcription was produced, which was used as a basis to further clarify the coding, present and discuss the results. After the codings were set up and major quotes were placed, the researcher went back to

the initial transcription in order to check whether there were any missing important comments or mis-interpreted excerpts.

7.1.3 Obtain findings and discussions of the interview data

Given various methods of analysing the interview data, the present results will be presented with two basic considerations. First, the interview data were used to support or explain the results obtained from the quantitative data (in chapter 6). Because interview data were derived from group interviews, quantitative analysis may not be justified. Nevertheless, since certain strategies were mentioned frequently, there will be some indications of the numbers. Secondly, the meanings were independently generated as grounded in the data itself to minimise impositions. Thirdly, the length of cited extracts may vary because of the amount of the data itself; some quotes may be complete, in other cases key phrases are sufficient to capture what appears on close reading to be the respondents' meanings.

The following presentation of interview data separates the two groups of language learners (i.e. Chinese learners of English and British learners of Mandarin) with subheadings which relate to the learning strategies discussed in Phase I. Then discussions derive from either interviewees' and the researcher's (also as the interviewer's) remarks. A cross-comparison of the two groups of language students will be highlighted.

7.2 Chinese learners of English (CE)

7.2.1 Listening

7.2.1.1 Media orientation

There is a 'thick' body of description in this category which emerges after coding students' responses. The resources of listening mentioned by this group are mainly from "*TV programmes*", "*TV news*", "*TV commercials*", "*films*", "*radio programmes*", "*audio cassettes*", and "*English songs*". In this part, there are frequent comments which take the

form of: *"I always/sometimes learn vocabulary by ...; I like ...; I think this is a good way"*.

7.2.1.2 Advantages of listening through media

It seems that many of the CE see listening and TV viewing as a positive way of receiving vocabulary. One student mentioned, *"I always learn vocabulary through TV commercials"*. Similar descriptions were obtained from different students with more detailed reasons. Two students like learning vocabulary through the media because *"there are a lot of new words"* and *"good words"*.

However, the use of listening resources not only gives students access to new words, but also provides opportunities for remembering the words. One student commented that *"if you hear them several times, you just remember them. You don't have to memorise or keep looking them up in dictionaries all the time"*. Listening can also confirm the words which have already been learnt. One student said,

> *"Sometimes I watch CNN* [TV news in English], *although I don't understand what the reporter says, but if he or she say some vocabulary I know, I'm very cheerful, as I can get the ideas."*

Clearly their recognition of vocabulary in authentic listening contexts is important not only to receive new words but also to recognise and retain them and thereby gain confidence.

CE may have some opportunity to preview or review vocabulary for set tests or listening comprehension classes (i.e. "*studio class*") by listening to text-related tapes in language labs. As one student mentioned, *"I try to listen to tapes in advance before class, as some of the words are difficult and I would like to try my best to memorise them before class."*

Some students recognised that such lexical exposure helps to *"know their sounds and pronunciation"*, *"trying to hear the sound"*, *"hear the word"*, and *"learn how to spell*

[words]". Resources, like TV programmes, films, or songs may be useful not only for listening but also for seeing the words in translation. One said, "*listening to English song...I listen many times and I get the chance to review them when I read the lyrics*". Similarly, another two commented that they find Chinese subtitles useful for English language films on TV, *"I just keep it in my mind"*.

7.2.1.3 Disadvantages of listening

However, listening activities do not necessarily guarantee that abundant vocabulary can be learnt. One student indicated, *"...sometimes I'll try TV programmes...but I can only understand one or two words"*. Another said "*some of the words are difficult*". Obviously, the students' general vocabulary level, and its relation to the density of unknown words in media input is rather important. Further, using listening resources was seen negative by some students. Four students claimed that tapes in language laboratories were *"boring"*, *"not very interesting"*, *"not very useful"* or *"there's not enough time"*. When asked for detailed reasons for such responses, one indicated that

> *"... the majority of the topics are politics, psychology or mathematics, I don't like them. They are not very interesting. Sometimes we cannot find out about the topics we like."*

Overall, listening resources have both positive and negative sides for learning vocabulary. The first benefit is that they may provide sound and pronunciation input, which may help students to acquire their pronunciation, and then pronunciation may sequentially help their word spelling. The fact that in media programmes key lexical items are likely to be heard many times, in context provides an alternative to more traditional ways of memorising vocabulary or repeated consultation of a dictionary: *"I try to watch movies, and sometimes the words used in the film may be different from the dictionary, um...because they are in a conversation, so it's not as formal."* The second benefit is that through listening resources students may learn authentic uses of vocabulary, and distinguish the difference between definitional meanings in dictionaries, and meanings in contexts.

However, such contexts are not always authentic or practical, as one example shows: *"Um...sometimes I listen to ICRT* [Taiwanese English radio programme] *at home. And every morning, there's a sentence to learn. Yesterday there was a sentence like 'There's an offensive smell in the air.' "* In principle, it should be possible for teachers to overcome at least some of these negative reactions by exercising a wider choice when ordering commercially produced materials or by producing their own listening resources, by editing off-air recordings of programmes of likely interest. Further, the benefits of listening result from contact with contextual meanings and pronunciations of words which can be combined with visualising words and their translations. Self-selected listening resources are more often chosen for individual interests.

7.2.2 Reading

7.2.2.1 Resources and functions of reading

Chinese students frequently mentioned that learning vocabulary can be helped through the reading of: "*advertisements*", "*books*", "*newspapers*", "*magazines*", "*novels*", "*articles*", and through the "*lyrics of the songs*". The books are mainly "*novels*", or books used in class, like "*reading books*", or "*grammar books*".

Students believe that to enhance their vocabulary repertoire, they should read. As one student indicated: *"I think you just pick up one article everyday, and it can improve the amount of vocabulary knowledge you have"*. Other general benefits include: "*we can see the words"; "there are words appearing very often"*.

Students showed the function of reading to be not only to pick up new words, but also to review previously learned lexis: *"It refreshes my memory, so I can remember it and use it..."; "if there are words appearing very often, then they will be kept in my mind..."; "Reading many articles can help you to remember many difficult words"*. One key function of reading is to learn lexis by retrieving words through their repetitive occurrence. One interviewee's comment revealed this function clearly:

> *"Sometimes we just learn a lot of words but they are just forgotten, because we don't use them very often. But when reading articles, we can see the words, then we may repeat them more often."*

A word is learned when it appears constantly. A student mentioned that he recently learned the word *" 'rape' ...because there are so many reports about the crime, I saw the word frequently"*. Another student said that *"I try to read novels and if there are words appearing very often, then they will be kept in my mind."* Clearly, many students regarded reading as important for retrieving words.

Reading resources play further roles in learning words. One student mentioned that reading newspapers can help with translation: *"the newspapers can help you a lot, like China Post on Sunday has Chinese and English translation, and then it's a good way to understand things well."* Besides, some formal words can be learnt through books: *"I have learnt some formal words which are used in papers and books, like 'connotation' and 'denotation'. Or some words in poetry"*. When reading, students seem to be aware of lexical salience in terms of frequency of occurrence and importance in text: they are quite selective in choosing which words to look up.

> (1) *"When I read a book, ...sometimes I'll, um...choose important words to know in detail."*
> (2) *"..., I like to read especially novels, and if I see a word ...many more times, I'll think maybe the word is very important and that's a keyword ..."*

However, although many students give importance to reading for various purposes, some stress that it should have an element of devotion to learning vocabulary through reading. One student said that

> *"my teacher told us that it's good to learn vocabulary by reading. It's good but it's also hard work. Because if you want to remember the word, you just have to repeat it many times."*

While attention to vocabulary and memorisation are often mentioned in discussions of lexical learning, this kind of devoted effort is rarely considered (e.g. Schmitt 2000). Also another student confessed that *"I think maybe through lessons and trying to learn*

vocabulary from books. Outside the classrooms, I think I'm too lazy to learn more vocabulary". Similarly, students have their own needs. One interviewee indicated that: "*...words are very useful while reading, but not very useful for speaking...*", apparently indicating a lexical chasm between her reading and speaking skills (or needs).

7.2.2.2 Decontextual reading

Although these students were generally aware of communicative aspects of reading, a surprising number of them thought of learning vocabulary through reading in decontextual terms. Seven students mentioned that one aspect of vocabulary learning is that they "*read a word aloud again and again*", so that they can "*remember it*", "*pay attention to it*" and "*to remind yourself of it*". One student's similar decontexual reading is like this: "*when I read a book, I spell the unknown word. I have to know how to pronounce it.*" These comments do not necessarily imply a stereotype of mechanical rote learning that Chinese students adopt, as will be seen from later comments on contextual methods. But based on the above quotes, one might provisionally conclude that Taiwanese students do not always proceed to a higher level of contextual reading for learning vocabulary. Rather, the comments show interesting beliefs of "reading" in English which are perhaps different from what modern applied linguists and communicative teaching methodologists would advocate (Aebersold and Field 1997; Urquhart and Weir 1998). The above comments stress "reading-aloud" as a part of reading. Words come from a context, but actually might be learned out of context; reading texts are sources of words but not necessarily resources for learning those words, since lexical items are later memorised as decontextualised. There is only one comment from a student to indicate that she tried to guess the meaning of the words from what she read. She said, "*...I'm too lazy to check up words all the time. ...I'll ask somebody to help, and if that confirms my guesswork, I feel very proud of myself.*" Despite an assumption of reading to maintain vocabulary acquisition, it is interesting to note that students mention a variety of reading styles. For some Chinese interviewees, reading (in part) presents an opportunity to repeat words, and at times such repetition

can be out of context. This relates to a memorised-based learning pattern which will be presented later.

7.2.3 Speaking

7.2.3.1 Purposes of speaking

In general, speaking is regarded as a form of practising and using words, which is regarded as important for ensuring production of the words that have been learned.

> *(1) "In my way I learn English not by memorising the words, but trying to hear the sound, trying to talk to other people and use words."*
> *(2) "I think talking is a very good way to learn vocabulary. When we only learn vocabulary by books, we can pronounce it by ourselves, but then when there are conversations, the words we know don't come out naturally. Words need to be used. If you don't practise by using words, then you won't know how to use them."*
> (3) *"I think talking is a good way, because practice is important. For Chinese students, they try to keep the explanation in Chinese, but they don't try to use the word practically. I think we should look at more examples, and speak to more native speakers."*

In general, students mentioned two forms of lexical learning through speaking. One is by asking, and the other one is through conversation, although the data did not clearly reveal how they acquire lexis in asking questions or in conversations.

> *(1) "Asking questions. Asking questions is a very good way to learn vocabulary. We asked* [one teacher] *words we don't know, and she can answer and explain to us. It's a good way to learn."*
> *(2) "... I'll ask somebody to ... confirms my guesswork, ..."*
> (3) *"I think we can try to speak with our classmates everyday, and practise the new words in class."*

7.2.3.2 Infrequent practice of speaking

Taiwanese students seem to be aware that only relying on individual learning of knowledge of lexis is not sufficient, although they may have less opportunity of being interactive in class or with English native speakers. There are time limitations when practising speaking, especially in the learning environment of large classes. One student was clearly aware of time shortages when learning vocabulary through speaking in class. She argued, *"I don't think we have a lot of chance to do that* [conversation]. *I*

think it is a good way. But practising in the classroom is very rare." Despite students' awareness of limitations of practising speaking skills, there was no evidence in these interviews to justify statements that students' willingness to interact with other learners or speaking in the public is low.

7.2.4 Writing

7.2.4.1 Contextual writing

There were fewer comments on writing. Writing as a contextual production (e.g. writing an essay where the writing has to construct its own context) seems to be rarely referred to. More often, students mentioned trying to make sentences for practising new words. *"When I learn a new word, I'll try to make a sentence"; "..., you can try to make sentences to help you to understand"; "... the process* [of trying to make sentences] *would help you to practise a single word."*

7.2.4.2 Decontextual writing

One aspect of writing which was mentioned quite frequently was decontextual repetitive writing to focus on learning and memorising individual words. Eight interviewees mentioned this aspect. Typical comments included: *"Write down many times on a piece of paper, and look over it"; "write down words on a small card"; "Maybe I'll write the word in the corner of the page of the book, then when I turn to another page. I can look at it, some time later again, and again, and try to think of the place I put the word."* The key function of this decontextual writing is to help retain target words. Such memorisation is discussed below. Further, this aspect corresponds to one way that British learners of Mandarin learn lexis (7.3.4).

7.2.5 Memorisation

Three students directly indicated that "*I'll try my best to memorise*", "*...I will try to repeat it several times and I can remember it*", and "*...I would like to try my best to memorise them before class*". One student mentioned a general aspect that may "*help*

our memory" is to "*sing and listen to songs".* Several other aspects directly linked to memorisation were to "*write repeatedly*", "*read aloud*" and "*pronunciation*" which will be categorised as decontextualised memorisation below.

7.2.5.1 Decontextualised memorisation

Students' comments on memorising words which have been isolated from their contexts of occurrence refer to writing and reading.

Writing words repeatedly:

> *(1) "you can write down words ... to help you to remember."*
> *(2) "I'll write the word, ...and try to think of the place I put the word."*
> *(3) "I always write the new word until I can remember it."*
> *(4) "I write it several times to help me to remember it very easily."*

Reading aloud repetitively:

> *(1) "When I learn a new word, ...to read again and again aloud until I remember it."*
> *(2) "I must read it louder, then I may pay attention to it."*
> *(3) "When I see a new word, I just read again and again then I can remember this word."*
> *(4) "If you want to learn English vocabulary, you must repeat it again and again... You have to remind yourself of it."*

The data presented so far (however indirectly) indicate that students' memorisation involves different aspects of language skills and is an important aspect of vocabulary learning. Within such repetitive processes, Chinese students considered repeated pronunciation important: they like hearing the sounds, as sound input can help them to spell words, and this repetition helps their memory.

> *(1) "Just know how to spell it and keep its pronunciation in mind."*
> *(2) "When I think of a word, I thought about its pronunciation."*
> *(3) "I use a dictionary and learn the word's pronunciation and try to spell the word. At first, I'll know how to pronounce the word and then read it out again and again."*
> *(4) "...you know their sounds and pronunciation; you can learn how to spell them, and if you hear them several times, you just remember them.."*

It seems that for students to understand and learn a word, knowing how to spell it is seen as important for enhancing memory. One interviewee commented that:

> *"...we cannot understand every word all the time* [when listening to a teacher], *but we keep listening many times, then she* [the teacher] *will tell us how to spell the word, then I learn a lot because I can spell it and pronounce it."*

Moreover, Chinese interviewees' beliefs of the importance of learning pronunciation were also revealed when they were asked the requirements of being a good English teacher. Seven interviewees, mostly in different groups, made similar comments as the following:

(1) *"I like* [one teacher's] *accent. ...Her pronunciation is very soft and nice to make me feel like learning."*
(2) *"I think teachers should pronounce words very clearly."*
(3) "[One teacher's] *pronunciation is very good."*
(4) *"When the teacher can spell the word very clearly and let me understand it well, and I think she is a good teacher."*

7.2.5.2 Contextual memorisation

Apart from mechanical memorisation, there were also suggestions that link retention with use and practice, and by implication, with context.

(1) "... just use the word to remember the word."
(2) "I think I should use the word many times and then I can remember it."
(3) "Practise more to remember."

However, such comments on contextual memorisation were only very brief. It is unclear whether students rarely use contextual memorisation, or simply lack the ability to describe it in detail through English.

7.2.6 The use of Dictionary

Students often mentioned that they used dictionaries when they came across new words using any language skill. A major dictionary function is for reference.

(1) "... I saw the word frequently and then I looked it up in dictionaries."

(2) *"um...I like to see movies, so when I hear of new words, I try to look up dictionaries."*

Dictionaries are seen to have the further function to ensure that the meanings of words repeatedly encountered were correctly remembered. One student pointed out, *"I try to read novels and if there are words appearing very often, then they will be kept in my mind. I'll look them up in dictionaries later on."* Another two students indicated how their dictionary use was linked to remembering:

(1) *"I didn't check dictionaries in the beginning, I look through the word, I look at it and read it again, afterwards I check it up and then I remember it."*
(2) *"At first I look them* [words] *up in dictionaries, and keep reviewing them there, so afterwards I remember them."*

Importantly, when looking up words in dictionaries, students commented that dictionaries are used for locating words beyond the immediate form in which they are encountered from the basic forms of the word to sentences, even for examining unrelated words near the entry of the target word. Dictionaries, therefore, not only function as an immediate reference source, but as a wider language learning resource.

(1) *"I'll try my best to spell the word in the dictionaries, and look up some other information and words closer to the target word."*
(2) *"When I use dictionaries to check up a word, I also pay attention to some other words which appear around it."*
(3) *"I use a dictionary and learn the word's pronunciation and try to spell the word."*
(4) *"...when I look up things in the dictionary, I can see some other sentences in the dictionary, and then I learn many other meanings from there."*

Besides, using a dictionary plays a role to help in an interactive cycle of further review; confirming meanings and uses of words; and then memory enhancement.

(1) *"If I meet the same word again, I'll look up the dictionaries again, and I remember clearly."*
(2) *"At first I look them up in dictionaries, and keep reviewing them there, so afterwards I remember them."*

7.2.7 CE's expectation of teachers in classrooms

Apart from the expectations that good teachers need to have good pronunciation, students revealed further expectations from teachers when they were asked to describe how a good teacher teaches vocabulary. This may extend confirmation of students' beliefs of vocabulary learning from different perspectives.

Most of the interviewees indicated that good teachers are good at "*explaining*" words, when there are words "*they don't know*". Three interviewees specifically mentioned how good teachers "*use body language*" to help them to "*understand*", to "*get the ideas*", and to make the lessons "*interesting*". Good teachers, as two interviewees emphasised, should "*know many words*", and "*do some activities*"; such activities, were exemplified by two other students: "*using pictures and sing songs*", and "*using games*". Examples of how teachers provide word meanings include: "*use English to explain English words*", "*to use synonyms*", "*use very easy words*", and "*use many questions*". Three interviewees indirectly indicated that a good teacher should consider avoiding "*difficult words*". One said:

> *"...at times I don't understand what she said as she used a lot of words...um...(continued by another student "very difficult words")...yeah, more literature kind of words which may not be very practical."*

An interviewee in a different group commented:

> *"Our reading teacher is good, and she always tells us less difficult words to help us read keywords which occur many times in Bibles, articles, etc."*

Although some students expressed their preferences for learning 'easy' words, they also referred to the usefulness of particular words for comprehension and they said some of these would not be useful to learn for production. Such comments indicate that some students, even when thinking about 'easy' words may actively discriminate between perceived usefulness for reception and production as a decision before learning.

7.3 British learners of Mandarin (BM)

Since remarkably little has apparently been written about English speakers' learning strategies for Chinese or about their experiences of learning Chinese, this section reports their interview comments in some detail. It seems important to quote interviewees' comments at some length because they give insights into the learners' views and experiences. It is also important to hear their voices and representations; these are generally lost in statistical approaches in studies of L2 learning strategies. Like the Chinese interviewees, many British displayed a 'thick' understanding of using language skills to learn vocabulary.

7.3.1 Listening

Listening is said to aid familiarisation with the sound. An interesting group comment (with four final-year students) was:

> *"... especially for spoken language, if you hear words like ...when you watch TV, if there are words like "haodiao", "haoshuang",* [everyone laughs, as these are slang words used in Taiwan] *words sound rude or funny, then you remember them, because they're interesting* [*"yeah"* agreed the others]*."*

Another interviewee in a different group considered it useful to "*recognise the sound at least*". Another maintained that "*The best method of learning a language is definitely listening to the language, that's really helpful because you can hear it."*

For many British learners of Mandarin, *"tapes"*, *"classmates"*, *"teachers"* and *"native speakers"*, and *"friends"* are the main resources for listening input. Compared to Chinese interviewees, few British learners stressed the mass media as listening resources but some use *"audio cassettes"*, and one maintained that ideally *"video"*, and *"film"* can be helpful. Moreover, only one student (a Chinese heritage British student) mentioned that she listened to songs. Few students used media as listening resources unless they were in their final year and had experience of studying in China or Taiwan. This seems normal, given the likely language levels; many of the interviewees may not, firstly, be at a minimal level of proficiency to manage with unmodified materials, and

secondly, they may not be able to get access to these resources easily. One interviewee who stayed one year in Taiwan indicated a major difference of learning environment for Chinese learners of English and British learners of Mandarin:

> *"Take Taiwan, for instance, it's a completely different environment, because there are so much English--in the media, in newspapers, advertising, TV programmes, movies...We see no, apart from the occasional Channel 4 film* [British TV channel], *there's no Mandarin. So we're going into a thoroughly, not alien, but thoroughly different environment..."*

For some students, listening may not be an end of itself, but the basis for improving performance in other skills, including lexical learning. One said:

> *"It's very useful to me when I listen first, make a list of vocabulary, then go through presentation, sketches, and dialogues. And you don't master the words but you are able to recognise the sound at least, then think about the context and proper meaning for yourself and then you can go back and check if you are right...."*

Another gave details of the class listening activities:

> *"Every week we do half an hour's interpreting class, where two or three of us are co-ordinated by a teacher from Mainland China. You listen to tapes and then interpret into Chinese and vice versa. If there's a word you don't know, she* [the teacher] *will explain it. And also there's a TV screen which has it in Chinese characters, Pinyin and English. At the end of the day if you're in Taiwan learning Chinese and there's a word you don't know you'll have it explained to you in the context of Chinese or using examples."*

In general, listening was used as a resource to pay attention to words, as a basis to receive words, and then to further develop other stages of vocabulary learning.

7.3.2 Reading

7.3.2.1 Contextual dimensions of reading

The general resources of learning vocabulary through reading are *"texts"*. Specifically they include *"modern and classical texts"*, *"stories"*, *"newspapers"*, *"articles"*, *"prose"*, *"books"* and *"textbooks"*. Reading for this group of learners frequently revealed complex dimensions: contextual and decontextual. The contextual dimension includes approaching different types of texts in different ways, so that words are learned by

employing different reading strategies. Three selected comments from different interviewees indicate this:

> *(1) "When we're doing modern and classical texts, there's a whole lot of new characters every time, so the only thing we can really...um...make a start with learning actively is modern vocabulary-- modern normal prose and listening comprehension vocabulary."*
> *(2) "..., because there's so much literary vocabulary that we meet constantly, so it's very hard to do anything but passively. I think I may recognise many more characters than I'm able to write...many more...we can recognise probably twice as many!"*
> *(3) "It depends* [on situations of how I learn words]*...at the moment, we're using a lot of texts. It takes me, well, I spend the whole evening just looking at the vocabulary."*

In addition, reading a text can achieve a better understanding of the words from the contexts, and contextualised comprehension can lead to retention.

> *(1) "... when you read a book, you read the context as well. You can tell by just reading and telling what the words surrounding around it are--what it means."*
> *(2) "If I read a word often enough I remembered it. I don't write it down first; I don't do anything just read. Absorption."*

Contextual reading facilitated an understanding of the use of the words. There were three general comments on this aspect: *"understand in what context they're used."; "shows us how to use it so it makes it much simpler"; "easy to get the idea from contexts"*. Two interviewees claimed detailed benefits from two different types of contextual reading: reading from literature and from newspapers. The first comment shows the backwash effect of language testing.

> *(1) "For ultimately I hope the ideal is for every text, say Luxun's short stories* [i.e. Chinese literature], *newspapers' articles, just to learn all the vocabulary in that story so when you read all over again, you know all the vocabulary, and you're going to be tested on the text anyway. So you've got to know all the vocabulary if its in a short story it's going to be useful vocabulary."*
> *(2) "Modern Chinese is learnt very much in newspapers so a lot of that we will pick up random characters which we've been doing in class before we can then apply because we've seen the character before, you can start to make some sense of it when you're working it into*

English. So its not necessary vocabulary we've knocked into our heads, it's just been acquired."

Only one interviewee mentioned the positive aspect of reading in relation to knowing Chinese culture. She said:

> *"One thing I think might be good about those books is it's like being immersed in a Chinese cultural thing. You know, being taught in a Chinese way. It's like being immersed in Chinese educational culture."*

That this is an isolated comment seems to imply a relative weakness of conscious awareness of culture in relation to vocabulary learning, which is worthwhile paying attention to (Chapter 8).

7.3.2.2 Weaknesses of contextual reading

However, it may be controversial to claim unequivocally that contextual reading is efficient in terms of getting meanings since much depends on the time taken for reading, the frequency of unknown words, and the content of the texts. One student who advocated contextual reading said, "*...you can tell by just reading and telling what the words surrounding around it are--what it means."* But the other two students in this group seemed to disagree with this as a standard effect. They argued by joking first. They laughed and said,

> *"I'm really glad for you. I wish I could do that..., because she* [the one who keeps reading] *can read the passage, the paragraph, and guess the words in the middle. Obviously, it depends on what the word is..."*

Although the degree of using reading materials may reflect learners' proficiency levels of the target languages, this comment also indicates that guessing in context does not guarantee precision in inferring meaning.

Another reading problem for learners of Mandarin is that it is time-consuming; students need to have patience and keep up reading habits. One student asserted that, "*I just read. In my spare time, I read Chinese novels, so I get a lot of vocabulary from that."* But another student in the same group claimed "*I don't have time to do that. ... where do you get the time to read Chinese novels? I wish I had time to do that."*

The third weakness of reading is that there may be too many unknown words in the reading materials, which may make learners feel pressured.

"...if you are reading some of the books we're reading, they come up again and again, specially in different kinds of patterns like 'Menzi' or 'Shiji' [Chinese classics], *then you have to hope and pray* [laughs]."

Therefore, learners' reading speed may be adversely affected: *"I'm having a lot of difficulty actually reading. My reading is really slow."*

A final weakness referred to limitations of books, especially textbooks. They are unlikely to cover every topic which is appropriate for students' needs. Two students in different groups indicated that:

(1) *"...the situations aren't particularly relevant,--well, they seem to be a bit strange-- like going into a shop to buy a 'mao'* [fur] *jacket. They seem to be quite weird. But the situations we had like going into a restaurant made the vocabulary we had to learn more interesting so easier to learn."*

(2) *"One thing I find very difficult with the book we use is the terminology. ... We don't actually understand the English in the textbook. Well, I don't actually understand the English explanations in the textbooks."*

7.3.2.3 Decontextual reading

There were some indications that reading aloud, instigated by teachers is one method in learning to read Mandarin: *"the teacher will say it first and we'll repeat it"*; *"a lot of lessons, the temptation is to just read and follow"*. One student perceived this reading aloud to be old-fashioned, as a method, yet still effective.

"In other subjects I never use or get told to learn something to recite. It seems to be out dated. My parents seemed to do this in school, but it does wonders; it does work; it does stick in your head."

Such a decontextual training of reading is perhaps inevitable because of the nature of the Chinese writing system. British students were obviously aware of the literacy differences compared to their experiences of learning European languages, which will be discussed later.

7.3.3 Speaking

7.3.3.1 Vocabulary in need is vocabulary indeed

Speaking to *"people"*, *"native speakers"*, *"teachers"* or *"classmates"* is the opportunity to notice which words are needed in oral contexts. Many of the British interviewees commented on the positive aspects of learning vocabulary by speaking: "*because you're hearing it spoken and it's just spoken"*, *"conversation helps"*, *"we get more confident"*. They emphasised the importance of oral repetition and recycling, particularly in conversation in pairs:

> *(1) "I want to be able to say when people ask me .... So I remember it because it's specific to me, what I might need to say to other people."*
> *(2) "...conversation is good between students in the class. It's quite an important way. ...You hear some other students repeat same sort of thing, and eventually it sinks in... Someone will think of it and you haven't thought of it, and you think 'Oh yes we've used that before', and it helps you to remember them..."*
> *(3) "I think, yeah, conversation helps* [followed up what (2) said], *especially if they change it a bit, like change what you're doing, because it does help you to think about it..."*
> *(4) "Getting into talking to each other in class or do exercises in a book. Rather than teachers say that this is the answer. They say you ask the person next to you and then that person asks the next person, so you've talking the whole time and listening to people. Saying the same vocabulary over and over again. Some of it's got to go in."*

7.3.3.2 Confidence and risk-taking

Whatever the good effect that speaking may have on learning vocabulary, it is also interesting to note the students' belief that more than linguistic knowledge is needed; there is also a need to build up learners' confidence and to encourage them to take risks and not worry about making errors. One British female student commented that:

> *"Being brave enough to have conversations with people, I'm terrible at that. You have to be socially very good. You have to grasp the opportunity and speak to Chinese people. I think 'I'm going to make a fool of myself' no way!"*

7.3.4 Writing

Taking time to learn to write individual Chinese characters is considered inevitable. Some students pointed out that "*learning characters ... just takes time; it's very time consuming.*" For most of the British learners of Chinese, the writing system *per se* can seem initially very alien. Each word for them is square-like, or picture-like, which is not based on string-like alphabetic arrangements of word structures.

7.3.4.1 Contextual writing

As with Chinese interviewees, learning vocabulary through writing in context did not receive many comments. Only one interviewee clearly indicated that she preferred to learn lexis by writing down the words when she was writing an essay.

> "*I try doing* [following up someone's comment on writing and reading repeatedly], *but it doesn't go in me anywhere but I can remember vocabulary from the essay we wrote last year when I was writing about reforming the countryside and specific words, because I remember in context, where I forget the simplest things.*"

Nevertheless, British interviewees tended to perceive writing as a more mechanical process. There are more comments on writing individual characters, which may stem from interviewees' beginning level of learning Chinese, and the dramatic differences of Chinese written forms from English.

7.3.4.2 Writing for retaining characters

Students addressed the issue of learning written characters quite often. Especially in earlier stages of learning Mandarin, constant writing of the characters was seen as one important aspect of vocabulary learning. There were many comments about writing de-contextually to help to remember the words. Specific comments are presented as follows:

> *(1)* "*The way I do it is just to write it out again and again. It works quite well for me. I don't know. Also I use flashcards. If you don't write it out, you can maybe recognise the character, but then when it comes to someone asking you how to write it, you may not be able to do it... Being able to recognise it is a lot easier than having to write it out...*"

(2) *"I think it's important to learn the character itself. It's important for me to go through the stroke order, and the radical, and to be able to write it down for the first time correctly. It's like a logic which helps you... If you don't learn the stroke order then you can get confused."*
(3) *"In the first year I suppose I sat down and learnt by rote and you had to learn many new characters by rote, maybe 30 or 40 new characters each week, just going over them again and again and writing them out again and again."*
(4) *"I think* [the best method of learning] *can be a bit different for each person. For myself,* [the best method of learning can be] *just writing it down and saying it to yourself as you write it down, ..."*
(5) *"I think the best ways are to write loads of it, and I think that's very good. And when you write it, read it out loud each time, and remember each word ... Just write, write, write, write."*

This writing involves repetition which helps learners to remember Chinese words. But sometimes 'writing' does not necessarily mean physically writing on paper: *"I think visualising words is very useful. I don't like writing words repeatedly so much. I try to, I more like to write them in my head or in the air like doing strokes."*

Despite this emphasis on mechanical learning with repetition coupled with saying and visualising, it does not necessarily mean that students only employ this strategy for the overall vocabulary learning, without active production: *"I reckon just doing it by rote over and over, but you have to use it also. Yes, like that but also practise it by using it and talking it."* This shows that students are unlikely to single out only a few of the 'best' vocabulary learning methods; they show awareness that a range of different strategies have to be used for different aspects of words. Therefore, there were many comments in the interviews that showed a mixture of learning techniques (as will be discussed later).

From the above discussion, it is clear that students' methods of learning vocabulary are not exclusively either contextual or decontextual methods. Comments showed that often these seemingly bi-polar strategies complement each other, and when learning Chinese, such a bi-polarity is perhaps quite obvious due to its script differences from English. When the interviewees were asked about differences or difficulties of learning Chinese

compared to other European languages, there were abundant comments on this aspect, analysed below.

7.3.5 Chinese literacy

7.3.5.1 Pronunciation

One student emphasised a key link between pronunciation, familiarity with written characters, and changing memory processes.

> *"Well, can I say... you might not appreciate this but...* [everyone laughed], *in the first year or two, when none of us before* [university] *had learned Chinese, we spent the first year or so adjusting our memory to the forms and just the shapes, and it's not just characters themselves but the sounds. You have to adjust your voice box. But now things are a lot easier. So our memories have been modified..."*

Further comments show how students learn pronunciation through repetition and the use of standard or invented transcription. The second student was of Chinese ethnic background.

> *(1) "...to get the tones like, because my memory for spoken languages is quite bad, but you just get to repeat, repeat, repeat, and repeat until you get it right anyway."*
> *(2) "For me, like.... sometimes when I don't know the vocabulary or the pronunciation when I hear it from teachers, I write it down in Cantonese ways, so that's how I can remember it. Then, there are many special ways..."*
> *(3) "Sometimes I write it down how it sounds, like in English as oppose to."*
> *(4) "I have to do a lot more work, and it's the pronunciation as well. Like 'x', 'z' or 'j' (pinyin), I'm thinking of in the English way, then I think, 'no, you've got to say'...* [in Chinese pronunciation], *and change it."*

7.3.5.2 Differences of Chinese characters compared to Romanisation

Not surprisingly, students commented at length on the challenge of learning Chinese characters. One interviewee pointed out a clear contrast:

> *"It's different from European languages, because you can actually read it if you don't know the meaning of the word. You can read it, because the alphabet is similar to English. There isn't a short cut to learn Chinese words, especially characters. You just have to memorise it, and know it."*

This was recognised as being difficult even when it was mediated by Romanisation (mainly *pinyin*). One learner even went so far as to identify learning Chinese with learning writing.

> *(1) "The thing is....it's not Romanisation, it's so different because you have to do the Pinyin and then the characters. ..., you can't derive the meaning as you can from German and French. So it has to be in these languages you can always characterise the meaning from the word...In Chinese, of course, there's no indication whatsoever... as to the meaning."*
>
> *(2) "Because the character and the pronunciation, that's two things, so you're learning...More and more we are able to read the indications of the Chinese sound from the characters, like you have those characters which combine together to make another character, like "zao"[糟] and "gao"[糕], they bounce off each other, it starts to seep into your memory. But with European languages, they are always with an alphabet... French or German maybe,* [No. 3: *Oh yeah*] *and words I thought I'd forgotten if I try to reach out now will come back. I can't produce it actively, I can't sit down and talk German at someone, but I can still read it..."*
>
> *(3) "European languages focus on speaking while Chinese is focused on writing. If you know a European language in your head you can pretty much get by writing it down because they use the same symbols..."*
>
> *(4) "..., because English has an alphabet...If I say to you 'ji', you cannot write it in Chinese...If I say to you 'chicken' you know exactly what I mean. "*

Seven different interviewees from different groups emphasised the challenge that Chinese script offers fewer opportunities for them to guess pronunciation than the scripts of European languages.

> *(1) "That's the thing* [pause]. *You have to 'look and say' in Chinese. You have to look at it and remember it, or you can't work it out... you can't guess..."*
>
> *(2) "... Some French words sound similar to English...In Chinese you either know it or you don't... You've got it or you haven't; you can be totally lost..."*
>
> *(3) "It's hard to get a good balance between the spelling and the written things."*
>
> *(4) "The* [Chinese] *word you see does not really suggest the pronunciation to you. It may do after a while, when you start to recognise the pronunciation radical. But sometimes that's misleading*

also. So when you see a character you've really got to know it. You can't just sort of guess. If you're starting from one European language and then learning another, there are sort of interlinkages. If you're starting from an Oriental language like Japanese, you would find linkages with Chinese and Chinese with Japanese. But going from a set of European languages to an Oriental language, there's nothing to help you. It's all learning from scratch."

(5) *"Learning other languages is only half as much work as Chinese, well, for me, that is. ... whereas in French, you don't have to not only remember what they sound like, because I can just guess what the sound is. Well, I have to remember what* [Chinese] *sound like, And then you've not got to be able to recognise it, you've got write it down. So it's a lot more work."*

(6) *"I find - and many others feel - that Chinese is like drawing. The Chinese words don't always represent the sound, which is different from many European languages. Chinese pronunciation is so hard to learn for me, and I always get it wrong."*

7.3.5.3 Difficulties of learning Chinese literacy

Due to the major differences in scripts discussed thus far, learning to write (or read as indicated), is *"difficult"*, *"a lot more work"*, *"twice as hard"*, and *"intimidating"*. Most of the British students held that learning Chinese can be a more demanding task compared to learning a European language.

(1) *"It' s the only thing academic that I've found really intimidating. ...I've thought, Oh I'm going to burst into tears I can't do this...It is very alien and very difficult."*

(2) *"...they are so much more difficult to remember than the words in Roman scripts."*

In addition, British students were aware of the differences between 'traditional' complex characters and the 'simplified' characters, which are used respectively in the Taiwanese official writing system and in Mainland China. With the former, according to the comments of one group, it is easier for students to recognise the meaning of words, although the latter are easier to write. They commented:

(1) *"...if you look at simplified characters, a lot of times, you don't have the components, so it's more difficult to remember that 'emotion' if you haven't got a 'heart' or whatever..."*

(2) *"I find in terms of simplified and full formed, before we went to Taiwan, the course asked us to know both. But I think the majority of us did simplified because it's quicker. But coming back from Taiwan I*

now look at simplified and see it as a stunted version of Chinese. And I find it's far easier to memorise the full-form now than simplified."

(3) *"I do find something... I look something up as in a 'simplified' character and find it's pretty obviously a full character that I know which is annoying... "*

(4) *"Full forms are easier, a lot more easily recognisable to learn because there are more distinguishing features... You've got more information on the characters which helps you to distinguish it from something else... Simplified characters are more easily muddled. "*

Learning characters is sometimes de-contextual, for example when students feel the need to write stroke by stroke in order repeatedly (see 7.3.6.1 below). This is often termed rote learning, as this looks mechanical. But it seems unavoidable to go through this process of mechanical writing practice, as this is necessary to learn Chinese script. However, this may influence the British learners' attitudes to memorisation, discussed below.

7.3.6 Memorisation

7.3.6.1 Decontextual means of memorisation

Students need to rely on some means of helping memorisation: "*writing repeatedly*" and "*reading aloud*", as discussed earlier. In addition, two interviewees mentioned "*memorising down the page*" and "*a long list*", and around thirteen students mentioned *"(flash)cards"* along with *"pinyin"*, *"tones"*, *"characters"*, *"English translations"*, or *"pictures"* on the cards. Although these decontextual means seem to be frequently mentioned, some interviewees also found there were weaknesses in using them. Three interviewees considered using lists was *"boring"* and *"tedious"*. As for using vocabulary cards, two of thirteen interviewees recommended it, but they "*do not really do it*" or "*do not actually use it*". There were three typical reasons for explaining this apparent contradiction: "*I don't have time*", "*just haven't got time*"; "*there's far too many* [characters]; and:

> *"It's not very practical to write cards down. There are so many words that mean the same things. You're just going to go through saying....whatever...It could be any of six or seven meanings."*

Nevertheless, in terms of facilitating memory, there were other specific aspects including using a system, associations, and frequency that are mentioned in the data. These are more contextualised practices for memorising words.

7.3.6.2 Semi-contextual and contextual memorisation

- System

Interviewees mentioned that the memory retaining process is helped with systematic arrangements of characters in groups. The phrases "*to systematise*", "*to get an efficient system*", "*to develop some kind of system*", "*a really good system*", and "*some sense of patterns*" reveal the students' urge to systematise character learning clearly. Interesting details that were given by four interviewees are quoted below. The third comment is a response by a member of the same interview group to the second comment.

> *(1) "The best method will be to systematise it all into components, like learning through similar components, similar radicals. By that every new component, say you're using the 'hand' radical which are quite similar and have similar meanings, say 'manipulation' [操] if got hand radical on left, and then in a way you commit them to memory. You've learnt them in terms of context, meaning, you've learnt them in this context, component, like 'gen' [根], 'hen' [很], some of them even have a similar sound. That's probably the best way..."*
>
> *(2) "I think for the basic characters you have to develop some kind of system. You have to find the kind of system which suits you best, for the first 1000 characters, for example. You have to just go through and learn the basic 1000. Some of them are a bit weird; some hardly ever crop up. I don't know why they're in this 1000. My husband bought a box of cards, Chinese characters 1000, and I find that quite helpful. ...But after 1000 he developed his own system to make cards, and writing one character on one side and pinyin and meaning on the other, but I never actually manage to do that."*
>
> *(3) "I haven't managed to do that [followed No. 2], but everyone tells me its a really good system, because you mix the order a lot more than if you learn a list. And I noticed that how they come in order like 'lances', 'cave', 'lake', 'tree'.... You're able to see when you hide the Chinese you're able to say the Pinyin. To say it and to write it. But it doesn't come in this order. It's a bit more difficult. It's very mechanical learning and it's not very good."*

(4) *"... because the patterns are very similar, like 'shenme shihou '[什麼時候], 'shihou' [時候], which like that always crop up in the same sense of patterns, so they usually stick in my mind. Things like 'yuelanshi' [閱覽室], I find sometimes the longer the word, the easier it is to remember, like 'yuelanshi', because it sort of flows together. And then... the Chinese language has a lot of particles to make the rhythm work like that. It does work...Sometimes you try to look for the similarities between words, between similar things like 'tushuguan' [圖書館 library] and 'yuelanshi' [reading room], I remember these two because they are three syllable words, I suppose I remember most of the words by different rhythms."*

However, these were criticisms that Chinese learning materials often lack such systems; although as quoted (2) above, these systems could solve the difficulty of learning Chinese words. One interviewee in her final year emphasised the importance of engaging in systematic learning of the basic written characters. She said:

> *"There was this excellent* [Japanese] *book written by a former professor of Japanese ...And it's 2000 basic characters set out in this beautiful methodical way and I remember I just used to go through this book. I think it's about 6 or 8 characters, to go through on a page, and everyday I'd learn 8. And after a while it built up, but his book was really well organised because it starts off with these really simple characters and also I think Japanese language learning for foreigners is much more systematised than Chinese learning. ... I've often wished someone would write the same book for Chinese, just the first 2000 characters you need to know. I believe that somewhere there is a list of the most commonly used Chinese characters but I've never actually quite known where to get it from..."*

Although this study did not evaluate teaching and learning materials or investigate them from the interviewees, their awareness about well-developed systems for teaching and learning of Chinese in Britain should be taken into account in designing Chinese language materials.

- Association

Many interviewees shared examples to illustrate how they memorised words through association.

(1) *"Sometimes I think of the ways of remembering, what the words are like. I don't know...um....I don't know. I remembered when I have to do 'North' and 'South', and 'south' sounds 'nan', it's the same pronunciation as 'man' [男] in Mandarin, so I used to think 'man' is in the bottom. Things like that, so the association helps."*

(2) *"I don't visualise the word. I visualise the sentence. So for example with the 'cow' [牛], I don't visualise the 'cow' itself, I visualise the cow doing this and this. I visualise the sentence associated with the image."*

(3) *"I speak Cantonese, so I tend to associate the word with Cantonese, something like that. I might try and say something to the tutorial tutor which I don't know how to say in Mandarin, so...if it happens to be close to the Cantonese word, I'll learn it from that."*

Although it can be difficult for British students to write Chinese characters, many students said that some words looked complicated. However, remembering them can be facilitated by using word associations or analysis of elements of compound characters. Surprisingly, some students even stated that they could remember some complicated characters because they *were* complicated; this made them distinct.

(1) *"If it's a really unusual word, it sticks in, doesn't it? - like 'geng' [羹] which is like 'thick meat broth'."*

(2) *"... some of our teachers draw the words on the board. That helps, because you get the picture in your head..., and you remembered them very easily then, because you get an idea of a picture in your head."*

(3) *"I find things that are translated literally easy to remember, like 'dianbao' [電報, telegram], you know 'electric paper', because you remember that--you think 'oh, yeah, it's a different way of looking at it.'"*

(4) *"Some words are easier to learn because they're made out of two words that we already know, like 'qixian' [氣象 ,weather], so you know, we've already learnt 'qi' [氣] is weather in 'tianqi' [天氣], so it's easier. ... Or we learned like 'chang' [廠], and we learned like 'gong chang' [工廠]..., It's the kind of words like a team,..."*

(5) *"Also a lot of the words they have a lot of sense like logic, which makes it easier to remember. Like splitting the words up is useful-in two parts, like 'luko' [路口]', 'road-turning' ('mouth of the road')."*

(6) *"Although sometimes it does because part of the characters have... like 'chair' [椅] and its got a bit of 'wood' [木] in it. To learn radicals is very useful."*

(7) *"But some of them I remember by the way they look, like if they're a very distinctive shape of character or very complicated, semantic*

features like the word 'huyu' [呼籲]. *It's very complicated ...* [The word] *'to appeal', 'petition'. I remembered that because it's very complicated, and distinct."*

(8) *"And if you're referring to characters, I think memorising them correctly is extremely important. And er...When I do it ...if I do it correctly, I visualise images associated with the characters. Even if the character doesn't actually mean anything it helps me remember what the other characters look like."*

(9) *"... a complex character you can look at it and you can understand maybe if there is a 'heart'* [radical] *there, it's going to be an 'emotion' or 'something'...If you know the components it helps to memorise and to use it as well."*

Despite the benefit of associations and mnemonics, one student mentioned the difficulties of using mental associations. He said:

> *"... I tend to think that if I'm going to try and visualise a character it has to be quite close to its meaning because there's so many of them, I might be able to do it now. But when it gets to visualise something say a character that looks like a cow actually means something else, then I start to get confused with the real character for cow. So I don't do it by just doing it loads and loads of times by saying it, saying it to myself as I do it and eventually it sticks in my head. It's not quite as efficient."*

Nevertheless, students believed that analysing characters will gradually become more spontaneous, and eventually the focus of learning is not only on recognising the characters *per se*, but to see a wider meaning dependent on or deriving from the context. Besides, this more advanced process will be productive in writing. That is, by the time learners progress and encounter more words, such concentration on individual lexical items may be diminished gradually and more attention is paid to recognising words from contexts. Six final year students' comments outline such progress:

(1) *"As you develop 2nd year, 3rd year, you know the shapes, and then you're familiar with the individual meanings of the characters, and then they come together. Do you find that happens a lot now? You get characters, you know individual meanings, but together they mean something else and that helps you memorise because you know them individually."*

(2) *"... if somebody tells me a word-- then if they tell me what's in a word like how it's made up, then I can write it. I don't have to see the words."*

(3) *"When you first start you have to do them over and over again. There's no other way of doing it, I don't think if you've never seen them before. Well, I couldn't. I wrote them out--I wrote them over and over again...I haven't done it since I've been back here* [from China]. *But I think that's a time factor... There're so many...There's so much preparation and so much to do now...I think if I had time or if I have few words to learn, it's still probably the best way to learn. But a lot of words now we don't actually have to write; we have to recognise."*

(4) *"When it comes down to vocabulary a lot of the stuff, especially with the newspapers and stuff like that, we look up words and then translate them into English, you know, it's quite easy to get the idea from contexts, because we know two characters individually, and then you can stick them together, and work out another compound word."*

(5) *"... you can see by radicals and from contexts. Obviously it helps you to guess a meaning. But if you see a 'sword' radical or a 'body' radical, you can find out, you can guess. With this 'jie' [截], that there's going to be a 'weapon' radical on the right--cutting. It's intuition."*

(6) *"It's getting to the new stage, where you know parts of the characters and you can kind of take a guess sometimes. But it's still very difficult to get it right. You have to have seen and experienced the alphabet. I think it's experience. You have to get used to reading."*

7.3.6.3 Frequent repetition

In terms of different approaches to memorisation, the data indicate how students engage in an enormous amount of repetition of Chinese lexis through both natural and intentional access.

- Natural access

(1) *"But I think on the whole, although we should maybe have some system of learning, because we're very busy all the time, a lot of words we learn in a very random way, like they just go in. We don't really have time to sit and write out or learn like that. So lots of them we just learnt because they are the ones that standout the most. We picked them up just like a little child will pick up a word by using it a lot. Just by hearing them a lot and using them."*

(2) *"I think in an ideal world the best thing would be total immersion in it. ...We're doing it as a minor, and it's so difficult, because we have so little time, and I feel if we could be immersed in it even for a short time everyday, it would be so much easier."*

(3) *"I think it's much easier for me to learn French and German, because I lived in France for a week. I've been to Germany, so it's easier. I*

mean after university if I don't carry on speaking in Chinese, then it's just going to go. I've just got to keep it going."

(4) *"The more you read, the more words you pick up. It's like any language, if you're doing French, if you read more French or more Chinese, the more you read, you see the words all the time, they go into your brain and then you can write them down."*

(5) *"...Repetition, just daily acquaintance. I mean Luxun* [Chinese literature], *because I...I..., we do it three times, three different texts, so he* [the author] *uses the same characters, so you get used to the authors' style and stylistic points and vocabulary which comes up again."*

- Intentional access

The following comments show how students take intentional steps to memorise and access their memory for Chinese lexis.

(1) *"Starting up has been quite good, like learning it in pinyin first and then a week later learning the character. It sort of revises it, and then you can copy the character out a lot of times and you sort of already know its meaning quite clearly and you just try to remember what it looks like."*

(2) *"I don't pressure myself when I practise, but I keep practising words constantly. I practise them bit by bit until I feel tired and then I take a break. I'm aware of not making myself bored."*

(3) *"Usually I do it by memory. Take ten words at a time. Look at it, cover it and then that's how I always learn it. Just go through and do more and more and more. It takes half an hour to learn the lot...It's good."*

(4) *"um... the best way to help memory is only to keep memorising--try your best to memorise them. Or write it down to stick on the wall around me."*

(5) *"One of our teachers said that we're going to do Chinese Teaching Methods, which is by rote, to recite things, but I can still remember the things I recited. Because we have to learn, and have to use it, and I think learning set phrases was quite useful."*

(6) *"I've found vocabulary is difficult because there's a lot of it. The new parts I will remember, but older parts might fade away, you see. It needs constant, constant revision even back to the earliest notes, and things like that just basic things are always embodied in year head now."*

(7) *"Some words are hard to remember. Some words like adverbs are hard... it's so confusing. You just have to repeat them all over again. Like, I get confused with 'yige' [一个] (Chinese quantifier)."*

These comments on repetition indicate a need for constancy and determination on the part of learners. They show learners' awareness that such methods are not, in their experience, necessary for learning European languages. Some comments (particularly No. 6 above) show teachers' and students' awareness that these methods stressing repetition and memorisation are Chinese methods. These British students are thus using aspects of a Chinese culture of learning to learn Chinese, but their comments reveal that many are by no means comfortable with such ways of learning (see 7.3.4.2). However, such intentional commitments to memorisation need to involve a fairly high degree of self-awareness of learning. Aspects of knowing how to learn, an important aspect of learning, are revealed in the following category which is termed 'independent learning'.

7.3.6.4 Independent learning

Independent learning, as adopted by these British learners of Chinese, included self-selection of target lexis, using dictionaries, and translation.

- Self-selection
  - *(1)* "[The best way of learning vocabulary is to] *prioritise which are the most important characters* [agreed by *'yeah'* by others in the group], *which you think you're going to use a lot ..., and ones you like more, something like an ideal or a concept-is a word you might see quite a lot, especially in newspapers or articles, these kind of things. Just prioritise. You don't want to commit words into memory if you don't think you'll use them again."*
  - *(2) "...At the moment we're learning so many* [words], *so that you have to actually make a decision about what's important and what isn't. And that tends to be based on how many times it comes up in the text."*
  - *(3) "You have to think on your feet how to decide which word is the best, which makes the most sense, which have the same sense as English words. You have to think about it."*
  - *(4) "We introduce ourselves to a lot of new words* [everyone laughs]. *We're given a text, and they will say go and look it up, and then you turn up armed with your own list of characters to translate and stuff."*
  - *(5) "So many of our modern language classes you've actually been given the vocabulary lists. In listening comprehension, we're given words that we'll need beforehand so that we can make sense of it. Because obviously they can't give us the texts, but we've got the texts already so it's up to us to acquire what we want and what we don't want from it."*

This self-selection and self prioritising of target vocabulary is interesting because most coursebooks for learning Chinese isolate and list new vocabulary items with the implication that the learning target is to learn all the words listed. These students, however, perceive that there are simply too many of these for this to be feasible, hence they apparently prioritise, using such criteria as importance according to frequency, likely recurrence, and text usage. The latter seems problematic since some teachers are seen to expect students to ascertain the meanings of all words in a text in advance, unless they are already known. This might imply two levels of students' practices in lexical learning: the first, a survival level to get by in class, perhaps learning the word list in advance, and a second, the self-prioritised level according to use, particularly for reading newspapers or out-of-class texts.[23] In other words, these comments seem to also show that a balance between teacher specification of vocabulary learning targets (mostly as listed in materials) and learners' self-teaching of relevant vocabulary. The latter is often in relation to texts which learners read to prepare for class, and is therefore contextualised, the former may be in list form and, at the point of learning, is decontextualised, although the words will be used later in the context of a listening passage or reading text. Moreover, these comments strongly indicate the students' belief of the need to prepare lexis at the pre-text stage, almost as a required learning step in a teaching sequence. These pre-text items are, of course, normally listed in published materials for learning Chinese and are stressed by teachers of Chinese, but are not necessarily current in European language materials, or among teachers of these languages. Mainly, current EFL coursebooks do not anticipate the pre-text learning of vocabulary. Despite the predicted teaching situations, for students of Chinese, it seems necessary to integrate this pre-text lexical learning with the use of dictionary.

- Dictionary as a learning aid

Compared with the CE, the BM use dictionaries more to check meanings but less as general resources *per se* or as an aid to memorisation. Perhaps this is partly because the

[23] Proportions of independent lexical learning may be different between the beginning and final year student when teaching in class.

British students are aware of the weaknesses of Chinese dictionaries (see next section), and it is clearly the case that less effort by lexicographers and publishers has been put into learners' dictionaries for Chinese compared with ELT dictionaries. Number (4) and (5) cited below were two interviewees in the same group who made successive comments.

> *(1) "...we get a text ... and then... looking things up immediately in the dictionary and then translate the sentence in a while."*
> *(2) "There are various words like that which I have found have finally entered my brain--after repeatedly looking up."*
> *(3) "We usually get the articles or something, and then we have to go back and look for ourselves. Usually they are introduced in an article, in a piece of paper, so we look them up in dictionaries."*
> *(4) "A lot of times when we're doing a text, ...we have to look up all the words we don't know ... And the teacher will expect us to have already found out what the words mean. ...They don't teach us words...They let us look it up."*
> *(5) "In the beginning when we were first learning Chinese, obviously, they did tell us, but now we know how to use dictionaries. We look them up ourselves* ["*yeah*" responded others]. *"*
> *(6) "I think using dictionaries is a reasonable more useful way than vocabulary books."*
> *(7) "Dictionaries can be good for consulting when I've got nobody to ask, but I don't know how to use it properly..."*
> *(8) "It's a huge chunk of the work we do modern language Chinese...You look up in a dictionary on your own, and prepare for the class, then during the class we go through the texts. But we have already had the vocabulary* [in class]. *"*

- Awareness of the weakness of dictionaries

While the British learners found Chinese dictionaries useful and were dependent upon them, they were aware that these dictionaries had weaknesses.

> *(1) "In the prose there's a difference between the classes and homework. The prose we've given for our homework: you go away and you look it up, and you quite often make the mistake of taking something from the dictionary which is a direct translation, which you can't use in that context because it doesn't mean quite the right thing or its not the right grammatical function. It's, you know, an adjective and not a noun...That's a universal problem of translation though."*

(2) *"But then in the class you can say how do I translate this word here and the teacher can say what the Chinese would use is this but it is not a noun, it's a verb and so you have to restructure the sentence to say such and such which you can't obviously get from the dictionary."*
(3) *"But you can look the character up and find the meaning out, and then not necessarily remember it."*
(4) *"You think you've got the right word* [from the dictionary] *and then you can't use it in that context."*
(5) *"... in our classical class, which didn't go marvellously at the beginning of term. He* [the teacher] *was talking about simple character acquisition and the fact that some of us didn't know enough characters and he was saying characters that you keep looking up you can mark in a dictionary to show, you know, you can mark it in the dictionary...you look up twice, and next time you get another dot...Some characters I'll just look up forever* [smile]... *That might work actually, eventually, once I look things up...once you look things up two or three times. It gets a bit frustrating and you can take that character and actually learn it... I've actually been doing that, but every time you use a different dictionary, you think I've looked this up in that dictionary."*

Some of these difficulties seem to be not only in the use of dictionaries as such, but rather in the students' own awareness of the nature of dictionary listings of meanings or of the need to cross check located translations with reference to the context or backtranslation. That is, while it is apparent that Chinese dictionaries, for learners, could be improved, it is also apparent that learners' awareness of language and of the nature of dictionaries can be improved.

- Translation

Students often mentioned the role of translation between Chinese and English and between Chinese characters and *pinyin*:

(1) *"... sort of try and look at the text with the English and Chinese and cover up and try to repeat it."*
(2) *"Prose is likewise we get a text and then we do it in the session and then do some of it as well at home. And looking things up immediately in the dictionary and then translate the sentence in a while."*
(3) *"When it comes down to vocabulary a lot of the stuff, especially with the newspapers and stuff like that, we look up words and then translate them into English..."*

(4) *"Looking at English and Chinese and covering each side up. Doing it alternatively."*

These various forms of translation seemed useful for learning; some are clearly required by teachers.

(1) *"I think...when it comes to homework...translations I guess."*
(2) *"Translation from Pinyin into character is the best way of doing it, to get it into your head and to keep it there rather than having word association or visual association."*
(3) *"...very often what people do is... They translate two books, one is the character textbook and the other one is Pinyin. They will translate Pinyin into character and then compare and they will do lessons of that. A lot of people just do that. I think a lot of people do that. I personally don't."*
(4) *"We have to do translation and then you're going through them..."*
(5) *"Subtitles in the films are quite useful."*
(6) *"What I do is the books we've got have got the characters and the pinyin, so I write them out on separate bits of paper and try and translate one into the other and at the same time as doing that the English gets learnt."*
(7) *"...I learned French and there was a point where I started to think in French. But I haven't got to that point in Chinese yet...I would love to be able to think in Chinese because it's about language and culture whether people have ideas or whether your ideas are gathered by language that's one of the reasons I want to speak Chinese... When you can read a passage and you're reading it in your head in that language, not converting it into English that's when you know that you've learnt it... That'll be the bottle of champagne day."*

7.3.7 Some common aspects of vocabulary learning methods

7.3.7.1 Motivations

Despite difficulty in learning Chinese, many students believed that their interest in learning, and their acceptance of the target language can make learning feasible.

(1) *"..., see, French I didn't like it at all. I loathed it, so to me, learning a language with a new script is more of a challenge than learning another Romanised language."*
(2) *"That's a prime point actually* [followed up No. 1] *because the most difficult thing for me to is actually languages and I actually hate languages. The reason I'm doing Chinese is because the way its actually constructed is not a language like Romanised languages. What I'm doing right now is simply so archaic relative to language. It*

has to do with on entire world so it's not the same thing. That's why if I talk about languages, I don't like saying languages, I like saying Chinese."

(3) *"You really accept a language as it is, because you can't explain why everything is used like that, because that's the way it works, ...It just is. Something you can't explain. If you don't accept ..., then you're never going to be able to learn that language. Because you're going to have within you psychologically --you're going to have this block against learning the language... There's no difference with all languages concerning the vocabulary."*

One of the students with a French ethnic background argued that it was a stereotype to think that European people take advantage of learning European languages all the time. Referring to cognates and 'false friends', he said,

> *"English and French are thought to be more or less the same. But if you stick with 'more or less' you'll never speak either proper French or proper English. ...It's true. If you try to learn the language, you just make the effort... I use English words instead of French words and they don't have the same meanings, but they look exactly the same..."*

Therefore, despite the major differences and difficulties which have been highlighted about writing Chinese characters, this does not necessarily imply that learning Chinese as a whole is completely different from learning other languages as a whole.

7.3.7.2 General application to learning foreign languages

Many interviewees declared that there was a common learning focus across languages, but they gave examples of learning experiences with French, German, Latin (i.e. European languages).

(1) *"The only real difference is actually writing characters, because we have only used alphabets before. But actually in terms of speaking, listening, it's really much the same."*

(2) *"Much the same way* [to learn Chinese and to learn other languages] *really. I learned German two years ago and it was just from the textbook really but it's much easier because you can actually read it."*

Thus, while a background of learning European languages clearly helped with general language learning skills applied to Chinese, such a background also pointed up how learning Chinese was different in many respects.

(1) *"I learned German just before my A levels. I think actually it's very similar* [to learn Chinese and other European languages], *obviously there's a major difference in learning how to write Chinese. ...in the French GCSE course, we have the dialogues in the classes, and we also have language lab sessions, which again, is very useful, because it was just spoken to you then. So it's very similar to the methods that we have got here* [to learn Chinese]."

(2) *"I think with European languages, it's more likely to be a similar word like with French or German, whereas with Chinese its definitely not going to have anything in common with the English...With European languages I just used to look at the lists and remember them. I didn't use flashcards."*

(3) *"It's probably a question of level but I don't think it's a problem of method* [concerning differences of learning Chinese and other European languages]."

(4) *"Except the tones are different which may make learning different..."*

(5) *"My main problem was where to put the characters in my mind, because I'm not used to it. I can't remember* [Chinese] *words with Roman alphabet. But I think the same thing I learn French and German at school on the same principles. At least at the beginning just sitting down and learning by heart and then when you start reading books and there's a story."*

7.3.7.3 Contextual orientation

BM at different levels paid attention to learning vocabulary through contexts. One major part of learning characters tended to be decontextual as discussed, but contextual learning can be more efficient. One student mentioned that contextual learning eventually outweighed decontextual learning. He said:

> *"I think there's a danger, I'm sure that I experienced it as well when I started, of sitting down and thinking you're learning characters, and writing them down hundreds of times. And then in the end you don't actually learn them, you haven't really remembered them because you're not working efficiently. I think the most important thing is to get an efficient system, and it's a personal thing, I think. For me personally, I'm sure it's different for other people, it's just contextual. I'd much rather have something that I can actually apply..."* [Others in the group seemingly agreed with '*yeah*'.]

Not surprisingly, students feel that paying attention to contexts may help to know how to use the words. "*I think it's .. um... simply to ... um... first of all, you make sure that you can read the words and understand in what context they're used.*" Such understanding may consist of recognising word meanings and collocations.

> *(1) "When it comes down to vocabulary a lot of the stuff, especially with the newspapers and stuff like that, we look up words and then translate them into English, you know, it's quite easy to get the idea from contexts, because we know two characters individually, and then you can stick them together, and work out another compound word."*
> *(2) "... I think you have to learn vocabulary things in contexts, and together with other words and relate them to that."*

Not only did contexts help students to receive and recognise words, the following comments reveal some learners' awareness of the use of context to help lexical retention in their memory.

> *(1) "I learnt 'yanjiu'* [研究 research] *because I learned in a context, because I want to be able to say when people ask me if I want to do research. So I remember it because it's specific to me. What I might need to say to other people."*
> *(2) "Repetition of something in context. If you're writing about something, and something like 'modernisation' you know I was writing about and I found that when I first started that essay I had to look up everything in one English dictionary and a Chinese dictionary. But by the end I was just looking up odd characters and I managed to skip the Pinyin and I felt quite a sense of achievement. But then I feel most of that's gone. Whereas if I had to use it everyday, I wouldn't have lost it."*
> *(3) "I find if words are repeated often enough they do actually sink in. One word I thought I definitely didn't know a while ago was 'shu'[疏]—'sparse' or 'scattered' or 'few' just because it keeps cropping up in different contexts, it eventually sort of goes in."*
> *(4) "...if you learn it in a context, like if you're in a country and you don't know anything, and you learn it from native speakers, that's the only way you can learn it. I put that in the questionnaire I went to another country to learn a language just by asking people."*

It is clear that students' appreciated the need for contextualised practice and use but in some instances this needs to be preceded by or balanced with decontextualised practice with word lists. Some comments reveal that the somewhat artificial classroom practice

with discussion or making sentence examples is also useful, presumably because of constant use or repetition.

(1) *"Well, I really find it difficult to say* [what the best methods are]. *I think...well, I learned Cantonese before I learnt Mandarin. That was when I was working in Hong Kong, and I found my progress then was much faster, because I was actually in that environment...There were certain key bits of vocabulary I had to use, or people would say to me, and obviously I picked them up very quickly. You're forced to use them by yourself and that is very easy to learn. Or, maybe it's painful to learn, but it certainly gets you to learn them. Actual practical usage of words is obviously helpful. In an academic environment like this we're not in a real Chinese context, and we have to resort to more artificial methods...um, and then I suppose the best thing is to simply sit down with a vocabulary list... But then again it depends on the frequency with which these words come up. If it comes up a lot in the kind of passages we're reading, then that helps to reinforce it. If it comes up once ...a year, there's no hope of keeping hold of it."*

(2) *"When we actually have to use it, and try to put an article into Chinese, and then it helps a lot to try and use* [words] *in real situations. And one thing we do is compare two words or phrases meaning very similar things, but when you put them into English, they are not the same usage as when you use them in Chinese actually... Like the difference between... let's say 'wending' [穩定,stable] and 'pingwen' [平穩,stable], we have exercises like that where there are very similar English translations but with different connotations in the Chinese. It's a question of knowing where to use them."*

(3) *"I think as he* [No. 2] *was saying, it works best when you learn a word and then you can use it straight away. It usually gives you too much of a fixed translation, when in fact many words depend on the context."*

(4) *"I've got much faster at learning within about a month since I was in Taiwan, and I was absorbing stuff much faster, not just because I'm surrounded by it, but the immersion, being dipped into the environment."*

(5) *"Within a lesson we had with our books... I can't recall any of the other vocabularies from that lesson, off hand.... but I can remember that because I thought-oh, I must remember that, that is a word I'm going to need for myself personally if I need to talk to."*

(6) *"I think it's putting it into practice. Like, once you've actually learnt the words, then using them in sentences and when you're in class, it really gets it...stays in your mind, because you're using them constantly and speaking, listening to the teacher using it, just hear it again and again."*

(7) *"... the best method of all will be just sitting in the classroom going though it with teachers and your classmates. um... and going through the dialogues as we do. And I find it's very useful, and having to create sentences yourself from other words. Things like that... Experimenting with different words."*

Despite the pros and cons of contextual or decontextual learning that students' comments presented, there was evidence that students found it difficult to identify the best method to learn vocabulary, as number (1) above revealed. Their dilemma showed itself repeatedly in the interview: *"Well, I really find it difficult to say...", "um...", "It's really difficult to explain...", "Its' difficult...", "It's very difficult to pin down the method for it really,... it's difficult to try and explain it", "I think it's...um...simply to...um...first all...".* Such responses may imply that either they were not very conscious of their approaches, or there was an implication that they used a mixture of methods, and that since this is necessary, it is difficult or impossible to pick out one method. The latter seems to be more likely in the data, as shown below.

7.3.7.4 Combining learning methods

Many comments showed that students often used combinations of methods. This is particularly important because the Phase I questionnaire format may have had the limitation of asking for responses relating to individual strategies, rather than to combinations of strategies.

(1) *"It's very difficult to explain. I called it osmosis of vocabulary. You soak in the vocabulary, you don't look at the book and write it out hundreds of times really. You use it, and you use it again, and use it in class, keep using it...in mock situations. And then you just learn it. It comes in stages, you don't learn it consciously."*

(2) *"When it comes down to it with the bulk of the stuff, you're going to do. There isn't a substitute for having a list of the stuff and just learning the damn thing. That has to happen quite a lot, that's the crux of it. But trying to use it in a proper situation. Trying to speak to somebody who speaks it as their language helps a lot."*

(3) *"If it comes up you've just written it down and it comes up unexpectedly, you remember it so much better. Then, just by writing and reading a book."*

(4) *"I think it's very important that once you've been through the basics in vocabulary, in context, you listen to native speakers, ask them a translation, then construct a sentence which uses certain patterns but practising with new vocabulary. They can correct your pronunciation and meaning. It's important to be active, not passive."*

(5) *"I read, write or practise. And the more you practise words, the more you can use them. But I often pronounce words wrong, so I need Pinyin as an aid."*

(6) *"And also the best way is to use words by writing, speaking to others, or even speaking to myself."*

(7) *"It's difficult* [to say how teachers teach us words],*...it depends what discipline we're doing. If it's literature, then... we do it the night before. But if it's language class for the prose and composition, we just get it there and then. And that's difficult because we have to ... we see it, and at the same time we have to use it, so it's quite off-putting, you don't have time to really absorb it but then I suppose it's good for you to be put in a pressure situation like that."*

(8) *"We have to do translation and then you're going through them, you look up the characters in dictionaries. And then if we have time on our own, then we should use cards or something like that."*

(9) *"I think it's ... um...simply to ...um...first of all, you make sure that you can read the words and understand in what context they're used. Also, just to get the tones like, because my memory for spoken languages is quite bad, but you just get to repeat, repeat, repeat, and repeat until you get it right anyway. And language lab sessions that we have are very useful for learning and speaking and to remember... um... because you're hearing it spoken and it just spoken, because ... in a lot of lessons the temptation is to just read and follow. But in the language lab you're just spoken to and you get to understand it."*

(10) *"...Use it in conversation like I learned Spanish at school and you just forget it but if you keep coming across vocabulary in newspapers and you keep writing it down and you use it in conversations you get to be familiar and remember it."*

(11) *"The best method will be to systematise it all into components, like learning through similar components, similar radicals. By that every new component, say you're using the 'hand radical' which are quite similar and have similar meanings, say 'manipulation' if it's got the hand radical on left, and then in a way you commit them to memory. You've learnt them in terms of context, meaning, you've learnt them in this context, component, like 'gen' [木艮] and 'hen'[阝艮], some of them even have a similar sound. That's probably the best way ..."*

Again, these comments help to build up a consistent picture from the students' perspective: that repetition, memorisation, self-testing and revision, and sheer determination and persistence are necessary to learn Chinese vocabulary. The students give a strong impression that their learning strategies here are consciously employed (which would reinforce the validity of the questionnaire data from Phase I). Vocabulary can be learned in relation to any of the four skills, sometimes aided by translation and use of such aids as flash cards or dictionaries, yet few students focus specifically on an approach which explicitly integrates all skills. If anything, the writing of words is emphasised, and this can be explained by the challenge, from English-speakers' perspectives, of the nature of written Chinese.

7.3.8 BM's expectation of teachers in classrooms

When students were asked to think of how a good teacher taught them vocabulary, four general patterns of comments emerged. Good teachers were: helpful for speaking, good at arranging the lesson, giving explanations, and are native speakers. Several comments for each category are listed as follows.

- A good teacher helps students to speak
  - *(1) "Like* [one teacher] *gives lessons in Chinese and talks to us in Chinese which at first I found really daunting but now I find really useful."*
  - *(2) "I think* [a teacher] *is better for me because he has made me to speak more this year than last year. Last year I was not involved so much. But you had to volunteer to do it, so if there's a reading and you don't want to do it, you don't have to do it if you don't want to do it. But this year, he asked questions all the time, and it really involves everyone, so it helps a lot, because it's more motivating to do it."*

- A good teacher follows some system
  - *(1) "...they* [teachers] *just keep going over the same thing and eventually they'll drum it into you."*
  - *(2) "Very systematic in teaching, and teaching words in contexts or situations to help students to remember words. Focusing on Pinyin to help pronunciation. But I often confuse the Pinyin system with IPA."*
  - *(3) "I think my Cantonese teacher was very good. If there's a new word, he sometimes writes it down and he would re-introduce the word in the course of our lesson, and then the next time we had a lesson he*

tried to revise the word. And I thought that was very good. You sort of keep track of the words which have just been learned, and try to make sure that they've been repeated, a systematic sort of way."

- A good teacher gives explanations
  - *(1) "For me,* [one teacher] *is better because she went through the lesson slowly and clearly, though there's not much speaking practice. But I think different ways are all useful."*
  - *(2) "*[One teacher] *is easier to go to after if you don't understand something. A lot of people used to ask her questions all the time. Whereas this year it's more up to you to learn it."*
  - *(3) "But also the teachers we've had here have always been available. They've said if you don't know something--ask. You always feel you can ask if you don't understand it's no problem to ask--that helps a lot-- you don't feel that you're being passed over."*

- A good teacher is a native speaker
  - *(1) "Obviously the native speakers are good, they know what they're talking about. They don't just say this word means this, they give you a sentence and make you practice it so it will go round the class or something."*
  - *(2) "I think we've got the privilege in this Faculty, because half of the faculty are native Chinese speakers which helps a lot, and they give very good translations, English paraphrases, synonyms, very helpful, and very natural, because they are bilinguals."*

7.4 Discussion: comparing two groups

Table 7.1 summarises the similarities and differences of the interview data for the two groups. It is clear that the majority of the general codings can be applied to both of the CE and BM groups. That is, there are great similarities of the two groups regarding the macro-levels of vocabulary learning strategies (except the two codings 7 and 8). This is seen in the column of main codings, but regarding the actual practices apparently used to realise these codings, there are obvious differences in emphasis between the two groups. These differences are shown in contrasting columns (CE and BM).

Table 7.1:

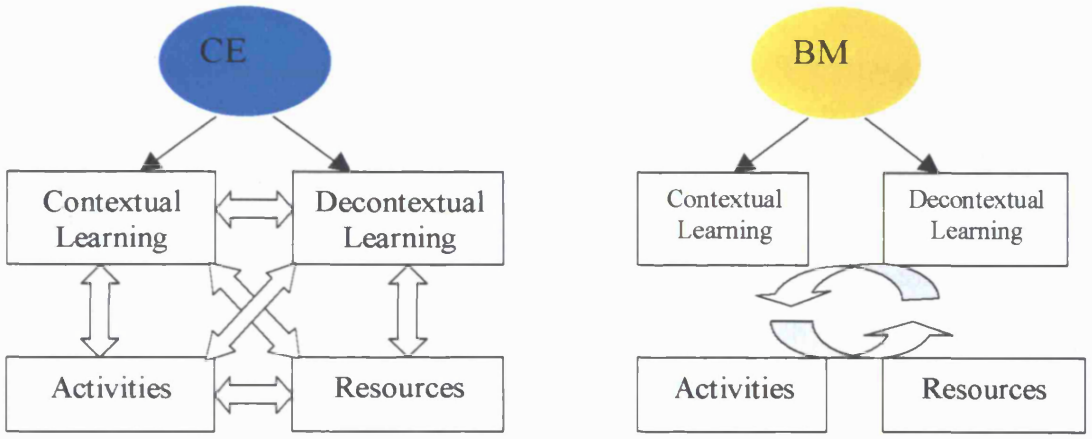
The main similarities and differences seen in CE and BM interviewees by applying the codings

Main codings	Differences in emphasis	
	CE	BM
1. Listening	Media orientation to listening; Advantages and Disadvantages of listening	Listening helps to remember the sound; Resources like 'tapes', 'teachers', 'native speakers' and 'classmates' are useful; Little mention about listening of media
2. Reading	Resources and functions of reading; Decontextual reading	Contextual and decontextual reading Weaknesses or reading
3. Speaking	Purposes of speaking; Low frequency of speaking practices	Speaking is for the use of vocabulary; The need and training for speaking
4. Writing	Contextual and decontextual	Contextual writing and writing for retaining words
5. Memorisation	Decontextual; Contextual methods to aid memorising	Decontextual, Semi-contextual and contextual methods to aid memorising; Frequency of repetition to aid memorising; Independent learning
6. The use of dictionaries	Using a dictionary as an independent vocabulary learning strategy	Using a dictionary as an aid to apply four language skills
7. Literacy	(no particular mention and discussion)	Learning pronunciation; The nature of Chinese characters; Difficulties of learning Chinese characters
8. No differences in learning other L2 vocabulary	(no particular mention and discussion)	Motivation; General application; Contextual orientation; Combination of different vocabulary learning strategies
9. Expectations of teachers in classrooms	Good at pronunciation, choosing words and explaining words	The useful teachers were pointed to be native speakers

Moreover, BM seemed to reveal more awareness of seeing vocabulary learning as a process and in terms of their own progress. Quite often, there were metacognitive statements like, "*when I'm in this stage...*" or "*When beginning to learn....*". However, CE rarely showed this awareness; their comments seemed to show that their belief of vocabulary learning was more fixed, no matter which stage of learning they were at. However, it is easy to misjudge this point; as English was not their L1; when the latter were interviewed, their difficulty in expressing themselves properly might have constrained their comments on this aspect. Further, there is also a need to keep exploring the possible reasons for particular comments, as the researcher suspected that this difference could also result from lack of interviewing experience among the Chinese group.

BM paid great attention to the forms or usage of vocabulary, possibly because they were at beginning stages of learning. Nevertheless, they also show awareness of use and context. Their comments seemed to show that the decontextual and contextual methods go hand in hand, whatever the learning stages they were at, whereas the data of Chinese learners of English seemed to show that this group could have more extreme preferences, i.e. either contextual or decontextual methods were employed. There was less direct awareness that they need some combination of vocabulary learning methods. Thus, Figure 7.1 shows, from a general consideration of the data that CE tended to treat the elements portrayed in the figure as discrete elements. The arrows show that they could give examples of links yet these tended to be spoken of as paired elements (e.g. they gave examples of activities in relation to decontextual learning, but without referring to resources or decontextual learning). Therefore, it seems that (on a surface level) BM interview data represented a more pendulum-like process, swinging between contextual and decontextual methods with detailed information in between. That is, Figure 7.1 shows a more holistic linking between the elements illustrated. In contrast, in the Chinese interview data, vocabulary learning was a more linear process.

Figure 7.1: Comparative data generative model



British subjects' responses showed a tendency to give general evaluations across most of the coded comments. However, the description for contextual learning stood out as 'thicker' data. They emphasise the learning process rather than the resources available. Instead, the CE group seems to stress their use of learning resources more often. This is perhaps due to the fact that BM simply do not have many resources available for the four skill activities (listening, speaking, reading and writing) except for their books and teachers.

CE, moreover, seemed to view language learning in terms of using activities, as there appears a 'thick' body of descriptions for listening, speaking and reading. They mainly mentioned the resources of three language activities: writing is used for enhancing memory of word learning in English, rather than for producing papers, essays and the like. Quite often they seemed to emphasise the use of visual aids or supplements that can help them to learn words, rather than internal memory supports, such as the use of mnemonics or visual techniques. Even if the techniques of memorisation are also important for this group, they were mentioned quite rarely or superficially. Chinese students regard pronunciation as an important issue when learning English which may

be an important basis for memorisation. This seems to be their first step to access an unknown word. When they use dictionaries, it is not only the original target word they pay attention to. Rather, they also look for some other word entries near the target word.

It may be that there is some weakness of unreliable answers occurring in interviews due to "response effects" (Borg and Gall 1989; Dean and Whyte 1958). For example, some assertions may be very sensitive for the respondents to tell the truth, or respondents may have shown their indifference to some topics. But in this study, these factors seem to have had less effect on interview results. Firstly, the topic itself is not so sensitive or threatening to cause interviewees' hesitation to speak the truth. Secondly, most of the interviewees volunteered their involvement in this research to their teachers and the interviewer, so they were clearly committed in principle to it.

However, what might have been a problem for the CE interviews was language *per se*, because the language used (English) was neither interviewers' nor interviewees' mother tongue. It seems somewhat artificial that the Chinese researcher (as requested by teachers) used English to interview Chinese respondents in Taiwan. However, had the researcher insisted or using Chinese, access would have been much more difficult to negotiate through gate-keeping teachers. Seliger and Shohamy (1989) discuss how qualitative research in second language acquisition is loaded with unique problems, They indicated:

> "Research of this type seeks to describe what is occurring and what it means to be a participant in an activity such as acquiring another language. However, conclusions about what participants are experiencing are not easy to reach. It is not simply a matter of asking language learners what they think, since the observer and the learner usually speak different languages. The language used by the learners to describe their experiences is also language which, at the point, is still incompletely learned." (p.120)

In this study, the Chinese subjects preferred to use English to be interviewed in order to take the opportunity to practise their English with someone recently arrived from Britain, but English is still a foreign language for them. It is possible that their

description of vocabulary learning strategies was limited by the language of the interviews.

The British subjects, in general, seemed to readily accept the form of interview, and be tape-recorded. They tended to be more in a chatty frame with other persons in the same group. From time to time they made jokes to each other. There was also more interaction and following up of others' comments in the group interviews. Concerning the relationship with the interviewer, the interviewees viewed her as a Chinese native-speaker from outside the UK, who is interested in knowing how they learned Chinese in England. The interviewer was treated more as a friend rather than an authority, which seemed a useful basis for access and frankness.

On the other hand, the Chinese subjects in this study seemed to treat their interviews more seriously, as seen in the way they sat, they way they interacted with other interviewees (i.e. their classmates) in the group, and the way they spoke. They appeared to treat the interview as a very formal matter, even if the interviewer tried to develop a more friendly atmosphere. For example, the interviewer tried to react not like a teacher or senior figure, as Chinese students normally have this type of social hierarchy in mind, which would very likely inhibit discussion or frank expression. Instead, the interviewer tried to lower her tone of speech to take the role of a learner and friend, who is also a student like them. Nevertheless, despite such effort, the Chinese subjects remained more reserved, and they had to be more encouraged to talk than the British subjects. Moreover, some of them had to be persuaded to be tape-recorded. During the CE interviews, there was less evaluation of others' previous statements. Rather, there tended to be more individual views expressed of how they learn vocabulary in the group interviews. For example, there was a high frequency of initiating narratives by using *"I"* as a first person. Further, this group needed to be encouraged to talk by the interviewer using *"good"* or *"interesting"* as backchannels, by repeating questions many times, otherwise the subjects would remain silent or laugh at their peers whenever there was

silence: laughing for no obvious reason might be rather odd behaviour in Britain, but among Chinese it seems to be more acceptable behaviour, as it conveys a message that someone feels uneasy, and would like to cover up his or her embarrassment (Seligman 1990: 25; Gao and Ting-Toomey 1998: 40). Therefore, the researcher had to take account of such non-verbal language during CE interviews.

Although the research questions were not designed to elicit 'yes-no' answers, the CE subjects tended to provide short answers compared to the British group. Again, this may be due to the fact that the language used in the interview was not their mother tongue, which could clearly evoke a sense of formality or invoke conscious attention to linguistic expression. To avoid this the researcher kept mentioning that they could speak Chinese whenever they wished. However, another reason for this is perhaps the factor of the relative inexperience of research-training or research involvement of the Chinese students, and there was a lack of appreciation of the research interview as a genre or speech event, their lack of experience of discussing such topics in English, or the feeling that the researcher should know better than them and therefore fundamentally did not need to ask. There may be a complex combination of the above reasons.

On the other hand, when interviewing British learners of Chinese, the researcher found an advantage of being a non-English speaking interviewer. The researcher detected that whenever she intended to explore a topic more detail by asking "why"? or by using a questioning tone for "Yes?", the English native interviewees normally provided more details and examples rather than responding as if the researcher should have known the reasons.

It is perhaps easier to ignore the bias of time when interpreting the interview data, and most importantly, when comparing the results of the two groups. There was no control of the time for each question for each group. Therefore, the effect would possibly be

that some part of the data stands out more than others, and some questions were answered more thoroughly in some groups.

Therefore, the interpretation and discussion above may only have a general basis when comparing coding between the two groups. In fact, comparing the two groups was not the intention behind the interviews in this study. Rather, it intended to reveal how students learn vocabulary and how they evaluate vocabulary learning methods.

7.5 Conclusion

The earlier discussion supports the general conclusion that in broad terms (the codings in Table 7.1) there are similarities between CE and BM approaches. However, the details of the actual practices of these broad aspects may be quite different. It can also be concluded that such differences in details emerged in interviews but might well not have been revealed in Phase I questionnaires.

Although the interview data in this study may only be used as a supplementary tool (since one group – BF – was not interviewed), they were considered important as they generate more detailed insights into the ways the students learn vocabulary from their perspective. Interviews enabled students to express views in their own words and share their experiences, and their personal evaluation of the methods. Therefore, the data could highlight or explain fixed-termed categories created by the researcher in the highly structured quantitative data generated in Phase I, giving meaning and further clarification to the results of the quantitative assessments. This, in turn, leads to deeper understanding and insight of the aspects being studied.

From the earlier discussion, some methodological conclusions can be drawn. First, it can be concluded that the language used for the medium of the interview, and the timing, may have constrained the results. Second, as there may be cross-cultural differences of responses in interviews, it is perhaps necessary to structure the interview

in some modified manner when different ethnic groups are involved in a study. For interviewing CE, it would perhaps be better to tone down the researcher's status and try to maintain friendship with them in order to help them relax. In this study, the researcher considered that she maintained this target. She found that in the very beginning of meeting the Chinese interviewees, it was important to develop an interpersonal relationship with them, although the time for warming-up through greetings could take longer than in British interviews. If possible, a useful alternative would be to have an English native speaker to interview them, as Chinese students normally regard interaction with native speakers as a good opportunity to speak English in a more natural situation. Further, declaring that the interview content would be kept confidential from their teachers was necessary, because Chinese students may be anxious about whether the interviews might be indirectly used by teachers to judge their performance (since these interviews were in English). All in all, the cross-cultural or cultural modes of interaction in the process of interviewing is a feature which may need to be taken into account as one of the biases in qualitative research.

CHAPTER 8

BACKGROUND, RATIONALE AND RESEARCH DESIGN FOR PHASE II[24]

8.0 Introduction

Phase I looked at general vocabulary learning strategies, and classified them in terms of students' own evaluation of frequency and efficiency. The findings seem to show that there is some asymmetry of emphasis on the majority of the vocabulary learning strategies because of different cultural backgrounds of learners at a micro level. It is recognised that 'cultural' is a complex notion (see Chapter 4): here it is taken to include key aspects of socialisation into learning in family, educational and other situations. It also recognises that 'culture' at national levels is a problematic concept which includes diversity and that culture is not the only influencing factor underlying learning strategies. As Chapter 7 showed, the nature of the target language is also a possible factor in cultures of learning languages.

But L2 students' vocabulary learning strategies are seen here in a framework of both contextual and consolidating strategies (2C), which may involve the 5R processes, i.e. receiving, recognising, retaining, retrieving, and recycling in four language skills at macro level. This framework seems to apply across the learning of the languages considered here, in different cultures. For example, the general principle of learning words through seeking to *recognise the meanings of the word, translations, equivalents, memorisation* or *contextual input* seem to be valued by all the groups of subjects regardless of learning levels and cultural backgrounds. Therefore, while there are apparently different features of learning vocabulary showing distinct aspects of cultures

[24] Part of the findings of Phase II of the study was presented with Dr. Martin Cortazzi at 31st BAAL Annual Conference at the University of Manchester in September 1998. Further parts were presented jointly at the 5th International Conference for Language Awareness at the University of Leicester in June 2000.

of learning from different cultural orientations, there are also general applicable methods for different ethnic groups.

Overall, the main findings from Phase I imply that one of the important goals of vocabulary learning must involve achieving basic understanding of the new words that learners encounter from the initial stage; the more comprehension occurs, the more likely correct production can take place. In other words, learners may store and retrieve words easily when the knowledge of the vocabulary has been classified into categories based on a set of psychological principles (Aitchison 1994; Hsia *et al.* 1995; O'Malley 1987; Oxford 1990; Thompson 1987b). These 'existing frames' may also function as 'schemata' to help to learn new items. Learning can be easier when learners can quickly fit a new word into the old frames, as they not only comprehend but also remember it.

Nevertheless, it is open to question whether students' learning beliefs studied from Phase I are valid since they are not related to concrete words. That is, different respondents may have different types of words in mind when filling in the questionnaire; in Phase I, this was not controlled and it could considerably affect responses. In particular, if words on which they are focussed represent culturally loaded concepts, this might involve the difficulty of transforming the meanings from one culture to another, since it is believed that lexis embeds cultural aspects, which need to be studied and compared (e.g. Wierzbicka 1997). Phase II focuses on students' responses to specific cultural keywords, in terms of the perceived meanings of the words and the strategies recommended to learn them. It is the assumption of Phase II that where there are cultural differences, the schemata of one culture can be different from another (see 8.3 for research aims). In this case, it seems natural that some L2 learners may have more conscious awareness of the strategies employed in the attempt to learn these complex cultural keywords.

This chapter provides a research background from which this Phase was oriented. It demonstrates some asymmetry of interpretation and translation between Chinese and English, and analyses selected cultural keywords. A set of six Chinese cultural keywords was selected to ascertain any such asymmetry between Chinese native and English speakers' perceptions of the meanings of the words and how they might be learned. The six Chinese cultural keywords analysed in this Phase are: *ren* (仁), *li* (禮), *xiao* (孝), *de* (德), *he* (和), *junzi* (君子). Therefore, the general aim is to explore whether the frequent and efficient strategies recognised from Phase I remain applicable or asymmetrical when learning particular difficult words which are laden with cross-cultural concepts.

8.1 Explore cross-cultural keywords

Although there is a uniqueness, arguably, about cultural keywords, which reflect the core values of one culture, learning them across languages or cultures can not be completely impossible. Wierzbicka (1991: 333) believes that

> "... every language has its own key words and that these key words reflect the core values of the cultures to which this language belongs. ... cultures can be revealingly studied, compared, and explained to outsiders through their key words... to be able to study, compare, and explain cultures in terms of their keys words, we need a culture-independent analytical framework, and that such a framework is provided by the natural semantic metalanguage..."

As Wierzbicka (ibid.: 334) argues,

> "if one does not move from these approximations and vague analogies to something more precise, one remains locked in one's ethnocentric perspective and can not achieve a true insight into the conceptual artefacts of a foreign culture".

This study analyses the six Chinese cultural keywords through English as a starting point to demonstrate the core values of Chinese culture embedded in these words. This is seen through the difficulty of translation.

8.1.1 Difficulty of analysing the cultural keywords

There are a few standardised scales and principles for introducing the differences of the forms between English and Chinese within L2 acquisition research development (e.g. Wong 1988; Yuan 1994, 1995, 1996). But scales for ascertaining the gaps between the two cultures seem to be few within an Applied Linguistics paradigm, although there are studies in social-cultural, anthropological or psychological disciplines which conduct such a comparison (Gale 1992; Ho 1996; Huang 1982, 1987; Myers 1996a). However, there is very little work of direct application to foreign language pedagogy apart from Myers' (1996b). Nevertheless, there are a few published studies which have examined a handful of Chinese cultural keywords through English with different research instruments. There are a number of reasons why these studies are not wholly satisfactory. Some focus on the cultural meanings of one or two words only, and none seems to investigate a set of related meanings with six or more words. Furthermore, different studies have employed different research instruments. Some only perform a conventional analysis of cultural contexts in which the target words are used, or employed a historical semantic analysis. Some researchers suggested investigations of different patterns of polysemes. To provide some ideas of the kinds of the cultural keywords which such studies have focussed on, four studies are considered below. Examples of the words from these studies follow.

(1) Huang (1982) used *ren* (仁, glossed as 'humanity') as an example to show how such a word embeds overlapped concepts which are not only different from equivalent words in English, but are also difficult to clarify. The different concepts are embodied in the word *ren* (仁), which is viewed as a whole by native Chinese speakers. Huang (1987) then used two words *xiao* (孝, 'filial piety') and *mei mianzi* (没面子, 'loss of face') to investigate the prototypical elements. He found out that the more aspects of prototypical concepts were included in the testing question, the more agreement would be maintained in the result. This may imply that the prototypical concepts of these words can be fuzzy and wide.

(2) Gale (1992: 15, 17) found that the word *chou* (愁) combines the senses of 'loneliness', 'homesickness', 'regret', 'despair', and 'endurance', so the Chinese classification of this emotion is different from what is lexicalised in the English word 'sorrow', which is a common translation.

(3) Ho (1996) indicated that there are no cross-cultural studies of one specific aspect of *xiao* (孝), often glossed as 'filial piety', due to the lack of conceptual equivalence in other cultures which are not Confucius-oriented.

(4) Myers (1996a, b) analysed three Chinese cultural keywords in total. He discussed *dai* (待, 'wait') and compared *si* (私, 'private'), and *gong* (公, 'public') through the polysemous elements of each word. Myers found that there are different degrees of overlaps between the elements.

Despite differences in methods of analysing the cross-cultural aspects of keyword meanings, general similarities among these studies show that first, there may be a lack of semantic equivalence concerning the cultural keywords between Chinese and English. Second, there may be complicated overlaps or embeddings among the conceptual meanings of the cultural keywords within Chinese or within their English putative equivalents, or vice versa. Therefore, translating such cultural keywords can be problematic. Given the precedent of demonstration that cultural keywords may involve overlaps or embeddings, this study will attempt to elucidate such relationships for CE with regard to six complex related cultural keywords. These will be compared with ways in which BM understand the same keywords. As has been shown, with the discussion of the few published studies of the Chinese culture keywords, this is innovative because the present study fully examines participants' understandings of the keywords using questionnaire and interview methods. The present study of six cultural keywords include *ren* (仁), *li* (禮), *xiao* (孝), *de* (德), *he* (和) and *junzi* (君子). The meanings of these words will be elaborated in 8.2.3.

8.1.2 The degree of translatability

Given the lack of immediately equivalent concepts from Chinese culture to English, at least in some domains, there may be a need to use many different English words or phrases to achieve some approximation to the Chinese meaning through different contexts. In other words, translations of cultural keywords to another language often do not work precisely, especially if specific words are widely recognised as culturally oriented. Even if some understandable glosses are used in the second language, they may have their own culturally-loaded concepts in the L2. For example, 'sincerity' can be interpreted differently by Westerners and Asians, which may cause some gaps in understanding, as the concepts work differently in different cultures: two different Japanese concepts are usually both glossed as 'sincerity' in English (e.g. Wierzbicka 1991). Such differences between English and Chinese have been systematically demonstrated through research using Associative Group Analysis techniques for the domains of family, religion, education (Szalay, Strohl, Liu, and Lao 1994). Finding no precise equivalent meanings may also be due to the polysemous nature of particular words (e.g. Goddard 1998). Polysemy refers to a word having different yet related meanings, and thus represents a kind of categorisation (Lakoff 1987). Because of the polysemous nature of some cultural keywords, there is a recent effort to show that the meanings of a key term can be reliably and accurately analysed through its polysemes. Analysing such polysemy of a keyword can have explanatory value when there is recognition both of the distinctive way in which its meanings combine and of how that distinctive combination of meanings reflects the culture (e.g. Myers 1996a, b).

However, any claims about the analysis of the polysemous nature of the cultural keywords may not be valid across cultures; there is a question of whether the key polysemes can be free from another cycle of cultural bias in the L2. For example, Myers' (1996b) attempt of analysing the Chinese word *si* (私), frequently glossed as 'private', is not precise. He argues that:

"The common translation of *si* as *private* is therefore not adequate. Indeed, 'private' is not even the strongest element. Furthermore, the item representing only 'private' without the other two ['selfish' and 'illegal'] was not considered *si* at all. Also, two items, neither of which contained the 'private' element, did receive positive responses. It would be a mistake to teach students that *si* and *private* are equivalents."

Without arguing the validity of the stories that Myers (1996a, 1996b) employed in his design, the findings again confirm that it is problematic to translate one cultural keyword to another culture in another language.

The following section gives minimal details of the NSM approach. These details are important because first, the approach is not widely known (in spite of considerable published work), and second, because the terms will be employed in other sections (see 8.2.3, 8.2.4, 8.2.5 and 8.4).

8.1.3 Use of Natural Semantic Metalanguage (NSM)

Over several decades, Wierzbicka and her colleagues have proposed 'a semantic metalanguage based on language universals' (Goddard 1997, 1998; Goddard and Wierzbicka 1994, 1997; Wierzbicka 1985, 1991, 1992a, 1992b, 1996, 1997). The basic idea is that translation can be possible if there are 'semantic counterparts' across languages, which can present more culture-independent concepts. The intention is to use a small set of natural English words to explain non-English concepts (or vice versa) in order to solve the strong version of the argument that those cultural keywords are not translatable to another culture (Wierzbicka 1991). In principle, any language can be used as an analytic framework because all languages are held to have equivalents of the basic terms. The sets of the words used in this way are called 'primitives' in different languages because they are held to be basic, semantically irreducible terms. They do not need to be further specified, since they are commonplace, understandable terms in most

or all languages, and are held to be (potentially) universal. They are 'natural' because they are normally occurring authentic words in all (or most) languages and a 'metalanguage' because as a framework they can be used to describe or analyse any language.

The NSM is, of course, far from the only attempt to devise a logical, neutral, or even perfect language or universal set of terms to describe the world (see Eco's review 1997), but it is an important recent semantic framework which has been set up to study keywords across cultures and to avoid terminological ethnocentrism. In recent years, additional terms expanding the original set of the primitive words have been proposed: there were 14 terms in 1972, 32 (to 35) in 1992, 39 in 1993, and around 60 in 1998 (Goddard 1998: 58, 325; Wierzbicka 1992b: 223, 1997: 26). In November 1999, the number of the terms was still around 60 (Goddard 1999). A recent list from Goddard (1998: 58) follows in Table 8.1.

Wierzbicka's NSM has influenced research in the areas of not only analysing the semantic features of key words, but also for formulating analyses of speech acts and discourse by 'cultural scripts' (Goddard 1997, 1998; Wierzbicka 1985, 1996). These scripts explicate cultural terms by using a specified format and restricted syntax so that the NSM primitives can be combined in strings or formulae. The scripts are held to account for usage, norms of interaction and interpretation, and rules of speaking but they may need some cultural contextualisation to be understood. It is believed that a NSM can be a tool to help achieve cross-cultural understanding, because the tool itself would be basic, not biased, and translatable across languages and cultures.

Table 8.1: The set of primitives for a natural semantic metalanguage (after Goddard 1998)

Substantives: I, YOU, SOMEONE, PEOPLE/PERSON; SOMETHING/THING
Mental predicates: THINK, KNOW, WANT, SEE, HEAR
Speech: SAY, WORD
Actions, events, and movement: DO, HAPPEN, MOVE
Existence: THERE IS
Life: LIVE, DIE
Determiners: THIS, THE SAME, OTHER
Quantifiers: ONE, TWO, SOME, ALL, MANY/MUCH
Evaluators: GOOD, BAD
Descriptors: BIG, SMALL
Time: WHEN/TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME
Space: WHERE/PLACE, HERE, ABOVE, BELOW, FAR, SIDE, INSIDE
Interclausal linkers: BECAUSE, IF
Clause operators: NOT, MAYBE
Metapredicate: CAN
Intensifier, Argumentor: VERY, MORE
Taxonomy, partonomy: KIND OF, PART OF
Similarity: LIKE

Goddard and Wierzbicka (1994) and others have convincingly demonstrated with a limited number of words in a wide range of languages and cultures that the NSM can be effectively used for semantic analyses for concepts or feelings, which are culturally different. Many examples have drawn on different aspects of human beings' relationships or values, such as 'friendship'; 'emotions' in different cultures; terms like Chinese 'want' and 'request' (Wierzbicka 1996). While this system of analysis has been used for potential analyses of some areas of Chinese (Wierzbicka 1996; Chapell 1994), it has not hitherto been used for the set of cultural keywords which are studied here.

8.2 Background of the six Chinese cultural keywords

The six selected words in this study are: *ren* (仁 , 'humanity'), *li* (禮 , 'propriety'), *xiao* (孝 , 'filial piety') , *de* (德, 'virtue') , *he* (和 , 'harmony'), *junzi* (君子 'gentleman'). The meanings of these six keywords are discussed in 8.2.3. They are central to a larger set of terms. Other terms include *dao* (道 'way'), *yi* (義 'righteousness'), *zhi* 智 'wisdom'), which are also key concepts in (Neo-)Confucian heritage cultures. The whole set has been widely studied in the Chinese classics for well over 2,000 years. They have been considered central to Confucian and neo-Confucian developments over at least two and a half millennia but have received major attention in philosophy and education since the 13th century and were institutionalised over centuries in the Chinese civil examination system up to the early 20th century.[25] These words have also been generally recognised as problematic to translate into English, and it can naturally be assumed that they involve some difficulties to learn, as this chapter will show.

8.2.1 Selection of the six cultural keywords

Before deciding on the words to be tested in this study, the first step was to examine which sets of words relating to Chinese-British contexts may possibly have features of an "atomic bond", or "cobnet" in semantics (Aichison 1994), or "semantic clusters" (Tinkham 1993; Waring 1997), because such a feature may be more problematic and difficult to learn.

The general survey of the existing definitions or translations of the six words chosen for this study (see below) showed that they have very cultural or specific philosophical roots, in Confucianism or neo-Confucianism, as they had been discussed many times by Confucius and his disciples. It was initially decided to focus on Confucianism or neo-

[25] In particularly the first five words are grouped under the terms of *siwei* (四維 'four ways of becoming humane') and *bade* (八德 'the eight virtues'). *Siwei* includes *li* (禮 'politeness'), *yi* (義 'righteousness), *lian* (廉 'upright'), *chi* (耻 'knowing shame'); *bade* refers to *zhong* (忠 'loyalty'), *xiao* (孝 'filial piety'), *ren* (仁 'humanity'), *ai* (愛 'love'), *xin* (信 'trustworthiness'), *yi* (義 righteousness), *he* (和 'harmony'), *ping* (平 'justice'). These words still commonly feature as moral exhortations displayed in contemporary classrooms in Taiwan.

Confucianism because the major Confucian virtues have definitions relative to each other which can be understood, even if their relationships may not be always clearly explained in a more logical way (Smith 1983). Moreover, it is widely recognised that even today they still either implicitly or explicitly affect the ways that Chinese behave, live or perceive (e.g. Scollon and Scollon 1995). Their general features are:

(1) All the words have a strong sense of Chinese moral teaching;

(2) All the words co-occur in primers which have been used for basic teaching and learning of Chinese literacy for hundred of years;

(3) All the words are recognised as representing unique Chinese cultural concepts, although they have been adopted in other Confucian heritage cultures, e.g. Japan or Korea.

The selected words have been frequently recognised as culturally central in Chinese literary and philosophical studies as the following sources show. Firstly, five words out of the six were collected as current "Chinese cultural code words" in De Mente (1996). They are: *ren*, *li*, *xiao*, *de* and *he*. Secondly, five of the six words are explained as key terms for understanding *The Analects of Confucius* in a preface to the translation by Huang (1997). They are *ren*, *li*, *xiao*, *de*, and *junzi*. Similarly, Hall and Ames (1987), in their highly regarded study of Confucian philosophy, comment at length on *ren*, *li*, *de*, *he*, *junzi*, and (briefly) on *xiao*. Thirdly, all six words occur in the reading primers which were used for many centuries in China, and are still used as primary literacy materials, *Qian Zi Wen* (*The Thousand Character Classic*) and *San Zi Jing* (*The Three Character Classic*) (Giles 1984; Li 1997; Shi 1987; Xu 1990; Xu 1994). Fourthly, three words, *li*, *xiao*, *ren*, were discussed as key elements in "China's cultural heritage" in Smith (1983). Finally, the words repeatedly crop up in discussions on Chinese literature and culture (see Table 8.2) and Chinese communication, for example, *ren*, *xiao*, and *he* are discussed at length by Gao and Ting-Toomey (1998).

Although *junzi* may not seem to be currently a common word, *jun* which means 'king' or

'emperor' acts as *junzi*: a basic idea of Confucianism or neo-Confucianism. Furthermore, *junzi* is a very wide concept in Confucianism, and it is not only a foundation of being a 'human being', but also a highest standard (i.e. 'decent man' or 'saint') of humanity. Besides, to take *junzi* for investigation allows analysis of reactions to its English translation, 'gentleman', which has different connotations from the Chinese *junzi*. Therefore, *junzi* was included as a keyword.

8.2.2 Common relational-moral qualities of the six Chinese keywords

These six Chinese keywords may reflect a background of traditional Chinese social-cultural values, because they have played key roles for centuries in the moral education of being human (i.e. the internal moral development or self-cultivation of the individual person), and constitute guidelines for raising awareness of one's relationship with others (i.e. the external social and moral development of relations between people or between the individual person and society). A "simple" and "sovereign" conception of the six words is what Gabrenya and Hwang (1996: 311) termed "relational-oriented-personalism". Figure 8.1 illustrates these two dimensions of meanings, which are explained below.

Figure 8.1: The basic nature of the six Chinese cultural keywords: *ren, li, xiao, de, he, junzi*

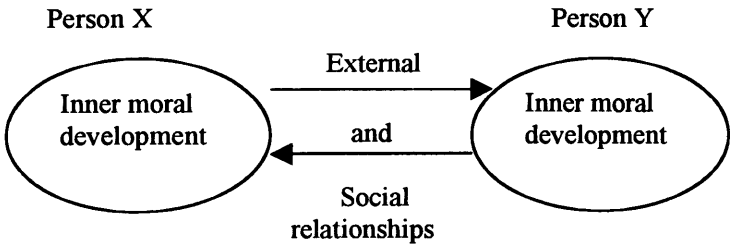


Figure 8.1 shows that the six words include meanings relating not only to internal thoughts and values of the individual but also to external deeds and social relationships with others; not only to self-realisation but also appropriate behaviour towards others

(person X and person Y are examples of such mutual relationships). The deeds envisaged here are the visible performance of each individuals' moral thoughts externalised as deeds mainly for the benefit of others, not only for the self. That is, the nature of the six words singly, and more so in combination, represents the Chinese ideal of cultivating a person, which means that from within, one should have every sense of 'good' thinking, and from outside, one has to present their inside 'goodness' to others. This 'goodness' is related to the Chinese sense of self.

Bond (1991: 33) comments on the Chinese self: "the Chinese self is described as 'permeable' (or meek) because the Chinese often appear to defer to the wishes of other people. In effect the term 'self' becomes a substitute for the concept of personality itself". Bond emphasises that the Chinese concept of self tends to be more social-oriented, which he argues is different from the Western concept. He continues: "the moderation of the Chinese is shown in the fact that they present their selves as possessing both positive and negative features. This conception of the self probably reflects their society's need for modesty and balance" (ibid.: p.34). Hence, a fundamental connection between the six cultural keywords is that all may be based on the cultivation of an inner good self, and performance of this inner 'goodness' to others. Each of the six words is briefly discussed for their individual meanings below.

8.2.3 Specific meanings of the six Chinese cultural keywords with attempts to formulate NSM scripts

This section elaborates on the basic philosophical or historical meanings of the six cultural keywords to be investigated here. This general examination of their individual meanings provides a background of their semantic clustering and relationships. It leads to an overview of the surprisingly wide range of English equivalents which have been proposed by authoritative scholars when they have translated or discussed these 6 terms.

Further, in the NSM approach (see 8.1.3), cultural keywords are analysed using the basic set of primitives. These are then combined using a basic 'syntax' or agreed simple

syntactic formulae. This syntax and the keywords are considered to be easily translated because they use basic, everyday terms which are thought to occur in all languages and hence they probably have universal equivalence across languages. A formula is an ordered set of readily understood statements in simple terms, which is a 'cultural script' or explication of the keywords under analysis. Therefore, the basic formula in NSM terms may be useful for conveying the meanings of the six Chinese cultural keywords in English (or another language) to outsiders in a manner which is held to be free of the ethnocentric bias of expressing cultural terms in one language in the terms of another language. A preliminary attempt will be based on the existing translations listed in Tables 8.2.

8.2.3.1 *Ren* 仁

Ren was a word particularly used for its ethical sense according to Confucianism. It was also held to be one of the great virtues, or the greatest one, that Confucius clearly repeatedly emphasised. It is "the supreme virtue and the sum total of all virtues" (Huang 1997: 17). It consists of a concept that provides an important key to understanding the Chinese moral sense.

Huang (ibid.), after detailed investigation of the *Lun Yu*, believes that 'humanity' is the best translation for *ren*: *ren* is the way to show human kindness. To be human, one should have *ren*, otherwise he or she should not be called 'human'. Orthographically, the Chinese written character for *ren* (仁) symbolises how two persons are bound to each other. This may mean that people function together socially. However, the Chinese concept of being a man has been distinguished as different from Western concepts by many Chinese social scientists (Bond 1986). For example, Redding and Wong (1986: 285) try to explain that the word *ren*, "with all its overtones of connectedness and reciprocal relations, does not coincide in meaning with the English word 'man', with all its overtones of separateness, free, will, and individualism". But what exactly is the meaning of *ren*? There is a consensus that the interpretation of Chinese ethics is not governed by strict principles (Redding and Wong 1986:285). Any good definition of

ren is full of paradox and mystery, which is "discouragingly complex", and creates "despair" in attempts to define the meaning of it (Hall and Ames 1987: 111). Redding and Wong (1986:285) imply that a way of resolving Chinese conflicts of values is that each person decides their own conscience or *ren*. The general connotation of *ren* may focus on a person who not only has a loving heart in nature, but also does loving deeds; the term thus covers not only 'thinking' of love but also 'acting' out of love. Therefore, *ren* is also glossed as 'goodhearted'. Confucius mentioned that a man with *ren* is a real man. Therefore, the universal standard of being a 'perfectly good' person can in a way be termed as *ren*. There are, however (unlike Christian love, which currently at least is to show equality), differential dimensions of love in Confucius ethics. The core love starts from the kinship love (Huang 1997). Such love may need to be guided by concrete circumstances, regulations, external rites or rules, which are explicit in *li* (see below). Hence, *ren* and *li* have been put as "two aspects of the same thing" (Hall and Ames 1987: 113). *Ren* and *li* in counterpoint delineate human relationships, social networks, personal and social interactions. As discussed below, such a Chinese relationship network starts from a core family kinship, so *xiao* which is commonly glossed as 'filial piety' (see below) will also be one aspect of *ren*. Further, it is crucial to consider other needs and feelings. *Ren* shows consideration, compromises, integrity, yieldingness which demand a form of *he* ('harmony', 'peace'; see below) (cf. De Mente 1996; Gabrenya and Hwang 1996). *Ren* also closely links with *de* (or 'virtue' see below) because it represents the overall 'virtues'. As these connections imply, there is an argument that *ren* may be a complex superordinate concept in Chinese culture with a variety of co-hyponyms, including, possibly, most of the other five keywords studied here.

A possible NSM scripts for *ren* can be formulated as follows.

Ren

A provisional cultural script for *ren* is:

X does something good.

X does these things and wants to be a good person.

X does something good for people.

X thinks something is good for people.

When X thinks (wants) something good for Y, X will do it.

When Y feels good, X feels good; when Y feels bad, X feels bad.

X feels something good for Y.

X does good things to Y.

People can say something good about X because of this.

8.2.3.2 *Li* 禮

Li, from an analysis of the structure of its Chinese character, symbolises one's relationship with God, as the left radical is 'God', and right radical is the 'sacrifice' and the 'tools' used in the offering sacrifice ceremony. This word extends the scope of behaviours, rituals, or proprieties within relationships. In the Confucian tradition, there were five classified key relationships: the "Five Cardinal Relations (*wu lun*)". They were the relations between sovereign and subject, father and son, elder brother and younger brother, husband and wife, and friend and friend. These five categories have some distinguishing behaviours which differentiate one from another. Rituals, rules and the like were also promulgated in several Chinese classics, like the *Li Ji* (*Records of the Rituals*). Therefore, this word embodies the social norms that Chinese were expected to follow in relation to others. According to Gabrenya and Hwang (1996), among the five relationships, the most important one is the father and son relationship which results in *xiao* (glossed as 'filial piety'; see below). In other words, *xiao* is an important form of *li*, it is 'the act of *li*' (Smith 1989). *Li* can be 'conformed to the norms of *ren*' (Koller 1985), but is also 'an outgrowth of the inner spirit of *ren*' (Liu 1955), and a 'cardinal virtue of *ren*' (ibid.). *Li* also has a close relationship with *he* ('harmony'), discussed later. Again there is clearly an overlapping relation between these words.

A provisional cultural script for *li* is:

Li

X and other people know something is good.

X does something like this.

Y feels something good towards X.

People can say something good about X because of this.

X knows something is not good for Y, and X does not do/say it.

If X does/says something that is not good for Y, and Y does not like it,

People can say X is not good because of this.

8.2.3.3 *Xiao* 孝

Xiao is a concept of filial piety originally restricted to family relationships. The structure of the character clearly indicates the relationship between parents and children: one part is *lao* (老 'the elderly'), and the other part of radical is *zi* (子 'children'). Visually the two parts show an interdependence. *Xiao* is one of the ethical concepts which is generally taught among Chinese, to include: obedience, obligations, patience, reverence, sacrifice and so on. Bond (1991: 6) comments: "Children have the duty to support and assist their parents. When children fail to perform the duty of supporting their parents, their parents have the right to demand that their children pay for their support..." He emphasises that *xiao* is part of moral instruction: "Even today, moral instruction is taught in Chinese schools. Not only is this a valued legacy of the past, but such instruction also serves to bind together a larger political unit" (ibid.: 29-30). In Chinese classics, like the *Da Xue* (*Great Learning*), *Xiao Jing* (*Book of Filial Piety*) and *Lun Yu* (*The Analects of Confucius*), *xiao* is a principle of *ren* (e.g. Smith 1983). It is 'the root of *ren*' (Smith 1985) and 'the act of *li*' (ibid.). Although there is historical change in filial attitudes (or behaviours), filiality still remains as a valid Chinese cultural core value compared to other non-Confucian cultures (Ho 1996). This word and its counterparts with similar concepts appear not only in school textbooks but also in magazines and newspapers with high frequency (Liu 1986). Therefore, although this traditional filial piety may have been transformed in modern times, it is still a key

concept said to be unique in Chinese culture and in other Confucian heritage cultures (Ho 1996). Further, an extended meaning of *xiao* goes beyond the family. One of the strongest social relations in educational contexts appears between teachers and students. Teachers can be like their pupils' parents for a lifetime starting from the very first day of teaching.

A provisional cultural script for *xiao* can be formulated as:
Xiao (X: children; Y: father/mother)
X does something good for Y
Y wants X to do this.
X does this.
People think this is good.
Y does something good for X.
X wants to do something good for Y.
X has to think about Y always.
If Y asks X to do something, and X can not do it, X feels bad.
If Y asks X to do something, and X can do it, X feels good.
People can say something good about X because of this.

8.2.3.4 *De* 德

Combining cosmopolitism (*Daoism*) and humanism (*Confucianism*) in classical Chinese, *de* embeds a dynamic moral force or 'virtue' which one may acquire through cultivation (Hall and Ames 1987; Huang 1997). The main elements in this character consist of the dynamic process of 'walking' (彳) in the left part, and 'eyes' (罒) and 'hearts' (心) in the right part are involved in this process. Like the word *ren*, Hall and Ames (1987) indicated the complexity of defining the word *de*. They said that *de* "is painfully too recondite. Confucius states rather specifically that few are able to understand and realise it" (ibid.: 216). The minor virtues that are included in *de*, as Huang (1997: 16) counted in the *Lun Yu*, amount to over fifty. This makes it appear that

de is a powerful superordinate virtue. Several aspects of virtues which explicitly relate to the six keywords and 12 definitional elements in this study are: 'filial piety', 'brotherly obedience', 'gentleness', 'kindness', 'harmony', 'courtesy', 'like-hearted considerateness', 'moderation', 'restraint', and so on. Therefore, it seems that *de*, like *ren*, has a superordinate nature in Chinese culture. The difference may be that *ren*, as indicated, is an overall superordinate concept, whereas *de* is a superordinate aspect of concrete examples of *ren*. This is perhaps the reason why *ren* and *de* collocate together to form a common Chinese lexis *rende* (仁德).

De is thus doing or thinking something (including aspects of purity, integrity, heart, mind, conduct or character; dignity, prestige, moral force, moral power, personality)

A provisional cultural script for *de* is:

De

X knows/feels something is good.

X knows it is good to do something.

X knows it is good to be a person who does these things.

X only wants this and only feels this.

X does not think or feel bad things.

X wants what X feels; X feels what X wants.

When X thinks these things and feels these things, X knows X can do something and people feel X can do this.

People will feel X is good because X does something because of this.

8.2.3.5 *He* 和

Originally the Chinese emphasis of *he* was not only 'harmony', 'peace', or 'equilibrium' in terms of human beings' relationships, but also regarding a cosmic order of the universe and the relationship between the former and the latter. Within such relational systems, everyone has his/her own place. Hence there is an ideal Chinese living

philosophy, which consists of showing obedience, following rules (or orders), establishing peace, reducing conflict, being harmonious, and so on. In modern Chinese contexts, *he* is still an important element for all relationships (De Mente 1996). Having *he* implies being able to bring about positive effects, like wealth, health, or other aspects of daily life. One of the aspects of *he* is 'not being aggressive'. The possible realisation of this is seen in research concerning Chinese pupils who show less aggressive behaviours of physical or verbal aggression compared to some other ethnic groups of children in America (e.g. Bond 1991, 1996). In some ways, the concept of *he* reflects one aspect of *li* as indicated. As De Mente (1996: 145) comments:

> "The Chinese concept *li* ... evolved over the centuries from deep-seated philosophical contemplation of the relationship between man and the physical and spiritual cosmos. The goal of this contemplation was to divine the 'correct' behavior for man – correct in the sense of what was 'moral', meaning that it contributes to rather than detracted from cosmic harmony".

A tentative NSM script can be formulated for *he* as below:

He (including the aspect of harmony)

Everyone thinks this; everyone feels this, so everyone does this.

X wants to know what everybody thinks/feels/likes, then X can do this.

X does not want to do bad things, because X knows everybody does not like/want/feel bad things.

If X feels/does something, and X knows everybody does not feel/do this, X will not want to feel or do this.

People can feel something good about X because of this.

8.2.3.6 *Junzi* 君子

Junzi (provisionally glossed as 'gentleman') has received great emphasis in Chinese ethics. According to Huang's (1997) estimation, *junzi* was discussed in the *Lun Yu* ('The Analects of Confucius') over a hundred times. *Junzi* has several dimensions of meanings. In a more narrow sense, it refers to a 'Royal son' or 'officialdom' in ancient dynasties. It has expanded its meaning to refer to a man of 'virtue', 'humanity', who is

'exemplary'. There are difficulties in distinguishing a man of *ren*, i.e. *ren zhe* ('a man of humanity') and *junzi* ('gentleman'). After a careful study of *Lun Yu*, although Hall and Ames (1987) use different English translations for the two terms (the 'authoritative person' for the former and the 'exemplary person' for the latter), they conclude that there are overlapping features between the two. Such an apparently odd way of interpreting the Chinese keywords in English is revealed through the following from Hall and Ames (1987).

(1) The word *ren*

> "should be regarded as a qualitative transformation of person which embraces not only the achieved person, but also the process whereby this quality of humanity is realized. This definition of [*ren*] as the process of human realization is found specifically in the early Confucian literature: 'The realization of oneself is called [*ren*]'" (ibid.: 114).

(2) The word *junzi*

> "is a qualitative term denoting someone who has an ongoing commitment to personal growth as expressed through the activities of self-cultivation and sociopolitical leadership. In that 'the exemplary person ([*junzi*]) is not a functionary' ... describable in terms of specific skills or expertise, a person qualifies as [*junzi*] by virtue of the quality of his contribution to the fabric of human order, not by what he specifically does" (pp. 188-189).

Therefore, when the *renzhe* (仁者) and *junzi* (君子) have a qualitative sameness, it seems reasonable to conclude that the qualities showing from the keyword *ren* are applicable to the keyword *junzi*. Moreover, as discussed earlier, there are connections between *ren*, *li*, *xiao*, *de*, and *he*, so *junzi* shares the same closeness with the rest of these words, e.g. *junzi* is 'the act of *li*' (Smith 1985). The same writer makes the same remark of *xiao*. So far, from this background it seems clear that there is a semantic clustering of relationships between the six Chinese keywords.

A provisional script for *junzi* is:

Junzi

Someone thinks (wants) something good.

Someone thinks (wants) something good for Y.

X does good things to Y.
X does these things and wants to be a good person.
People can say something good about this.

In general, most of these provisional scripts may be used alternatively for other words without losing the sense of the word meanings. For example, the script of *ren* can also be put to the word *de*, *he*, etc. and still remain representatives of the word meanings. Such a phenomenon has justified the problems of the overlapping translations stated as the research problems in Phase II of the study, and will be discussed further below. Moreover, such a research problem was confirmed further through a questionnaire analyis in Chapter 9.

8.2.4 Fuzzy, overlapping, and clustering translations of the six cultural keywords

These six words have been translated using a surprisingly wide range of English words in different contexts. As one would expect, although some interpretations by different translators overlap, many quite different translations exist. This is demonstrated in Table 8.2 which has a representative list of different definitions used by different authors and dictionaries. The translations cited here are by both Chinese and Western scholars; they include some of the most prominent and widely quoted Sinologists. This list offers a picture of who translated what, and how they interpret the six words. Table 8.2 presents the definitions classified under each Chinese term and shows the range of terms in English used by the different translators. It provides a clear picture of the fact that these six words in fact do have fuzzy translations. These are worthwhile investigating because of the key role these particular terms have played in Chinese culture, particularly in classical literature, philosophy, education and socialisation.

Table 8.2: The Dilemma and the multiplicity of translating *ren*

	Koller (1985)	Ku (1984)	Lau (1979)	Legge (1980)	Liu (1955)	Moore (ed.) (1967)	Smith (1985)	Waley (1988)	Su (1990)	Wu (1985)	Zhu *et al.* (1986)
ren	1. humanity 2. human-hearted 3. virtue 4. benevolence 5. true manhood 6. moral character 7. love others 8. human-goodness 9. have propriety 10. filial piety 11. sacrifice 13. morally right 14. rightness 15. propriety 16. wisdom 17. faithfulness 18. principle 19. basis of human nature	1. foundation of a moral life 2. moral 3. benevolence	1. be-nevolence 2. love 3. considerate: do not impose on others what you yourself do not desire	1. be-nevolence	1. human-heartedness 2. love 3. humanity 4. be good 5. do good 6. humane 7. *li* is an outgrowth of the inner spirit of *ren*	1. humanity 2. benevolence 3. not focus on individual 4. loyalty to parents 5. true manhood 6. love 7. sincere 8. serious 9. socially minded 10. magnanimity 11. perfect virtue 12. moral life 13. moral character 14. compassion 15. human-heartedness 16. man-to-manness 17. reciprocity 18. loyalty 19. courage 20. trust-worthiness 21. universal love 22. morality 23. universal relationships 24. aboriginal self 25. propriety 26. concession	1. love 2. goodness 3. benevolence 4. man-to-man -ness 5. human-heartedness 6. kindness 7. virtues 8. moral attitude 9. tran-scendental perfection 10. holy 11. self-cultivation 12. virtue loyalty 13. virtue of consideration ethical concept	1. good is the most general sense of the word 2. gentle 3. kind 4. humane 5. unselfishness 6. considerate: an ability to measure other people's feeling 7. courteous 8. loyal in relationships 9. submission to ritual 10. a sublime moral attitude 12. human qualities at their highest 13. a mystic entity not merely analogous 14. embed *xin*: good faith, faithfulness, truth, keeping promises, fulfilling undertakings	1. be-nevolence 2. humanity 3. policy of benevolenc e 4. sensitive 5. kindhearted ness 6. virtue and morality	1. be-nevolence 2. kind-heartedness 3. humanity 4. merciful 5. kind 6. virtue and morality	1. be-nevolence 2. kind-heartedness 3. virtue and morality 4. have done anything possible in terms of traditional ethical code

Table 8.2 (continued): The Dilemma and the multiplicity of translating *li*

	Koller (1985)	Liu (1955)	Moore (ed.) (1967)	Smith (1985)	Su (1990)	Wu (1985)	Zhu *et al.* (1986)
li	1. harmony 2. propriety 3. religion 4. general principle of the social order 5. social relationships 6. love in parents 7. filial piety in children 8. respects 9. friendliness 10. benevolence 11. moral discipline in personal conduct 12. everything is propriety 13. can be conformed to the norms of *ren*	1. naturalistic 2. code of etiquette 3. propriety 4. a person follows the nature 5. cardinal virtue of ren 6. cardinal virtue of *yi* 7. ritual 8. regulation 9. as a guidance 10. harmony 11. property 12. obedience 13. hierarchy 14. humble 15. law 16. principle	1. principle 2. order 3. propriety 4. proper 5. reason 6. law	1. appropriate rules 2. appropriate rituals 3. appropriate properties 4. ritual 5. piety 6. the rules of good behaviour 7. polite 8. religion 9. ceremony 10. etiquette 11. good form 12. good behaviour 13. formality 14. politeness 15. courtesy 16. the rules of proper conduct 17. external observance of morality 18. principle 19. pattern 20. order in nature 21. organisation	1. ceremony 2. rite 3. courtesy 4. manner 5. politeness 6. comity 7. courtesy demands reciprocity	1. ceremony 2. courtesy 3. etiquette 4. manners 5. refined 6. protocol 7. politeness	1. ceremony 2. rite 3. courtesy 4. etiquette 5. manners 6. gift/present

Table 8.2 (continued): The Dilemma and the multiplicity of translating *xiao*

	Koller (1985)	Smith (1985)	Su (1990)	Wu (1985)	Zhu *et al.* (1986)
xiao	1. reverence 2. respect 3. honour	1. filial piety 2. respect of hierarchy 3. obedience 4. the act of *li* 5. sacrifice 6. the root of goodness 7. the root of *ren*	1. give respects to one's elders or superiors 2. show obedience	1. filial piety 2. filial obedience 3. filial piety and fraternal duty 4. dutiful son	1. filial piety 2. give presents to one's elders 3. show filial obedience 4. dutiful son

Table 8.2 (continued): The Dilemma and the multiplicity of translating *de*

	Lau (1979)	Legge (1980)	Smith (1985)	Waley (1988)	Su (1990)	Wu (1985)	Zhu *et al.* (1986)
de	1. virtue	1. virtue 2. purity 3. to renovate people 4. the practice of benevolence 5. reverence 6. filial piety 7. kindness 8. sincerity 9. receiving the appointment of Heaven is a great virtue	1. virtue 2. dignity 3. piety 4. kindness 5. co-operative 6. human-hearted 7. justice 8. moral personality	1. virtue 2. moral force 3. character 4. prestige 5. merit 6. power 7. moral power 8. enhancing the prestige of his culture	1. virtue 2. morals 3. moral character 4. heart 5. mind 6. kindness 7. have both ability and integrity 8. be of noble character and high prestige 9. benevolent 10. rule of virtue	1. virtue 2. moral 3. heart/mind 4. kindness favour	1. virtue 2. morals 3. capable and noble-minded 4. kindness 5. favour 6. heart 7. mind 8. moral integrity 9. moral conduct

Table 8.2 (continued): The Dilemma and the multiplicity of translating *he*

	Legge (1980)	Moore (ed.) (1967)	Su (1990)	Wu (1985)	Zhu *et al.* (1986)
he	1. equilibrium 2. harmony 3. a universal path	1. eclectic 2. centrality 3. equilibrium 4. harmony 5. co-existence 6. everything can have its opposite 7. cordial relationship 8. mental tranquillity 9. goodness of human nature 10. humanism 11. oscillation of *Yin* and *Yang* 12. interaction of two forces or extremes 13. the relationship between a person and universe 14. reciprocal/reciprocity 15. virtue 16. peace relation 17. capable of yielding 18. justice 19. propriety 20. concession	1. gentle 2. mild 3. harmonious 4. peace 5. affable 6. amiable 7. become reconciled 8. concord 9. amity	1. gentle 2. mild 3. kind 4. harmonious 5. concord 6. amity 7. reconciled 8. peace 9. coexistence 10. pleasant	1. gentle 2. mild 3. kind 4. harmonious 5. on good terms 6. peace 7. reconciled

Table 8.2 (continued): The Dilemma and the multiplicity of translating *junzi*

	Koller (1985)	Ku (1984)	Lau (1979)	Legge (1980)	Smith (1985)	Waley (1988)	Su (1990)	Wu (1985)	Zhu *et al.* (1986)
junzi	1. righteousness 2. propriety 3. modesty 4. faithfulness 5. morally right	1. a good son 2. a dutiful brother 3. are not disposed to quarrel with those in authority 4. not lacking dignity 5.affectionate but not partisan	1. gentleman 2. cultivated moral character	1. superior man 2. the ruler 3. both moral and political meaning 4. a prince 5. harmony 6. friendly 7. good man 8. complacence 9. quiet 10. calm	1. ideal man 2. noble 3. princely character 4. princely behaviour 5. gentleman 6. noble-minded 7. follow the way 8. virtue 9. sincerity 10. good manners 11. responsibility 12. trust 13. loyalty 14. uprightness 15. propriety 16. obedience 17. conscience 18. humane 19. just 20. act of *li*	1. gentleman 2. member of the upper classes 3. superiority of birth 4. superiority of character 5. superiority of behaviour 6. won't talk too much 7. not boastful 8. consist of *de* 9. moderation in conduct 10. moderation in opinion 11. avoid the extreme 12. wise man 13. superior man 14. both signify superiority of birth and moral superiority	1. gentleman 2. a man of noble character 3. a man of moral integrity	1. a man of noble character 2. gentleman 3. ready to help 4. moral integrity	1. a man of noble character 2. gentleman 3. a man of noble integrity

Table 8.2 reveals more than simply a translation problem, however. It is likely that scholars and students of Chinese culture, working in English, will use these terms and the various translations form key elements in discourse in English about the fields of literature, philosophy, etc, in China. It is also likely, given the complexity of the original terms in Chinese, that students of the Chinese language will at some stage seek to understand the original words through the translations, which thus may have some influence on this aspect of their language learning.

However, even Chinese children and students do not find these terms easy to understand and glosses and explanations in Chinese also vary widely. This is seen in Chinese primers, like *Qian Zi Wen* (千字文) and *San Zi Jing* (三字經), which highlights the meanings of the six words which are learned as the commonest meanings. These primers traditionally formed the first literacy material for children for a number of centuries and are still in wide circulation and in common use today among families.

These tables make clear that translations into English do show a wide range of variability. Some translators used many different definitions in English of a single Chinese term according to the contexts.[26] Other translators maintain one consistent translation or a very limited number of definitions across contexts. Therefore, these words seem to have complex and changing meanings. But the problem of definition and explanation remains. The former way of translating shows that these words may be translated differently according to the contexts, but this may leave English speaking readers confused since the word is too difficult to grasp or such readers may not be aware that the multiplicity of English terms all refer to one concept in Chinese. In contrast, the latter way of translating can simplify the complications of the word concept, but it is highly questionable whether the same English word is representative

[26] Clearly, a full analysis would need to examine each of these contexts, in both Chinese and English, to study each nuance of the meanings in context. This would require bilingual concordancing. However, the present Table 8.2 is sufficient to demonstrate that, and how, the translation varies. This establishes the complexity of the meanings and shows how these may overlap, at least according to translation.

on all occasions of use in the various contexts of occurrence, and whether English speaking readers will be aware that a particular term has this multiplicity of meanings.

While for many Chinese speakers, these words seem to have distinct meanings, at some level, in Chinese, they also seem to overlap (see below for the analysis of responses of Chinese speakers). The translations into English, however, show a wide range of separate terms (see Table 8.2). For example, Koller (1985) has at least 19 terms for *ren*; Moore (1967) used 26 terms for *ren* and 20 terms for *he*. At the same time, there is a great deal of overlap. For example, *ren* is translated as 'virtue' (Koller 1985; Moore 1967; Smith 1985; Su 1990; Wu 1985; Zhu *et al* 1986), but so is *li* (Liu 1955), *de* (Lau 1979; Legge 1980; Smith 1985; Waley 1988; Su 1990; Wu 1985; Zhu *et al.* 1986), *he* (Moore *et al.* 1967) and *junzi* (Smith 1985). Of the six terms, only *xiao* is *not* translated by 'virtue' in English among the sources studied. Conversely, a back translation from the English 'virtue' into Chinese, by any of these translators, could yield any 5 of the 6 Chinese terms. This depends on the context, of course, but it is clear from examining these sources that the 6 terms are complex, interrelated, and have overlapping or embedded meanings. They have potentially interchangeable translations in some contexts by some translators. Thus, *ren* is 'kind' (Waley 1988) or 'kindness' (Smith 1985), but so is *de* (Legge 1980; Su 1990) and *he* (Wu 1985; Zhu *et al.* 1986); 'harmony' translates both *he* (Legge 1980) and *junzi* (Legge 1980); 'reverence' is both *de* (Legge 1980) and *xiao* (Koller 1985); 'courtesy' could be *li* (Su 1990; Wu 1985) or *ren* (Waley 1981); while 'propriety' is given for *li* (Liu 1955; Koller 1985), *he* (Moore 1967), *ren* (Moore 1967, Koller 1985), and *junzi* (Koller 1985; Smith 1985).

This reveals a clear difficulty in translating and explaining precise meanings from Chinese into English for these terms. It may also be true that these words represent broad and complex concepts, which are not easy to explain briefly in Chinese itself. Therefore, finding proper or core English equivalents may be more difficult. That is,

there may be no equivalent concepts in English, so that the word chosen for translating is not very precise, even if it seems understandable in English.

Moreover, it is difficult to understand the cultural concepts behind the six words: most of the simple glosses given in English seem to only partially define them. Table 8.2 shows that firstly, some scholars translate many of the six words with a wide range of different words or phrases. Secondly, many of the six words are translated by various writers into the same English word. This happens with several sets of overlapping English words. Thirdly, it is clear that the six words have complex cultural meanings and that these relate to each other. Fourthly, the terms have been central in Chinese literacy learning and moral education for centuries, yet they are still surprisingly widespread in current popular editions of the *Qian Zi Wen* and *San Zi Jing*; however, the glosses in Chinese for young learners still reveal some diversity of explanation. Fifthly, by implication, these words will be difficult lexical items for foreign learners of Chinese, with apparently complex, shifting, yet interrelated meanings. All in all, these six words seem to be appropriate examples for testing NSM theory.

8.2.5 Weakness of using NSM to interpret the six words

By considering the six words, which have provisionally been defined by NSM, we may find that one limitation is that their formulae are similar, or even the same. This may, of course, be the case because the provisional scripts are inadequately formulated. However, this may also reinforce the notion that the terms overlap, or thirdly, it may imply the need for more NSM terms in this instance, or that further analysis is required.

Admittedly, the NSM syntax and lexis lack appropriate universal nouns that can be applied here. This is perhaps the most difficult part to develop as although there must be universal concrete concepts like the *moon*, *sun*, *stars*, *wind*, *cloud*, *snow* and the like but there may be a variety of different categories across languages for these common objects (e.g. Goddard 1998; Wierzbicka 1992a). Despite the basic claim for a greater

precision, clarity, understanding - and there is still some risk of ethnocentrism in the description and comparison of cultures through NSM (see, e.g. Goddard 1999). 'Semantic analysis' and 'culture scripts' can be the most simplified alternatives for translation. However, the scripts are not easy to process and, therefore, may not present ease of understanding (although as shown, the problem of translating these terms from Chinese is a challenging one). In other words, the trap is that the NSM formulae may be, to some extent, too long. In theory, this need not affect an adequate description or analysis but in practice the longer the script the more difficult it becomes to understand or to check its face validity. As demonstrated, with the six Chinese cultural keywords above, it leaves the dilemma of which definitions or aspects of meanings the semantic analysis should draw upon to write the NSM formula. Further, there may be some imprecision or "obscurity" when comparing or distinguishing a set of words. Goddard (1998: 50) considered this is one of the weaknesses of Componential Analysis. The attempt of using NSM to analyse the six cultural keywords seems to be still in its infancy when it comes to achieving one of NSM's assumptions explicitly described by Goddard (1994). He assumes that "[t]o claim that two words are similar but not identical in meaning, it must be possible to identify the supposed difference in meaning" (ibid. p. 23). This difference should appear in the scripts of semantically similar terms.

Certainly, the intention of NSM is to rule out fuzziness of different words which apparently have similar definitions, as its intention is to define the meaning of each individual word. Wierzbicka (1996: 183) argued that

> "the *meanings* of individual words do not have to be dependent on 'whatever other lexical items may be available in the inventory'; and, ultimately, a definition, too, has to stand on its own. A definition expresses a hypothesis about the meaning of a particular word, and it is valid if it accounts correctly for the range of use of this particular word. The boundaries of this range may be 'fuzzy', but even this fuzziness can and should be predicted by a well-phrased and well-researched definition... Meanings can be rigorously described and compared if they are recognised for what they are: unique and culture-specific configurations of universal semantic primitives. When the configurations of primitives conceptualized in individual words are revealed, the

> relations between different words also reveal themselves. I think, therefore, that the semantic primitives approach to semantic analysis also offers a necessary firm ground for the study of semantic field".

What Wierzbicka and her colleagues seem not to focus on is a set of culturally central words that have overlapping meanings. They give few examples of how a group of such related concepts can be distinguished using the NSM, (exception include Goddard's (1997) cultural scripts for Malay, and Wierzbicka's (1997) scripts for *friendships*), even though they argue that each definition has to stand on as its own (as in the above quotation). Nevertheless, the attempt made here demonstrates that the six Chinese words, which stem from a particular culture, can be reasonably well defined for individual meanings, yet the differences from other words within the same set are revealed less obviously. Nevertheless, as Goddard (1997) claims, the main benefit that NSM may bring is to offer 'rules for speaking' across cultures if not precisely or accurately, at least it can help to clarify some vague or difficult terms. But Goddard seems to imply that relying on NSM may not be sufficient for translation, therefore there is no intention to abolish traditional translation. Instead, he emphasises that "adopting a standardised metalanguage for semantic explications and cultural scripts, does not mean, of course, that one must forsake conventional English altogether"(ibid.: 185). Scripts will be expositions using only the terms and syntax of NSM, a highly restricted language, but supporting comments or explanations may still be given, in English.

There is a clear implication in Goddard's work that cultural scripts can be used in language teaching. He (1999) argues that primitives and scripts enable greater precision, are easier to understand, involve less risk of ethnocentrism, and can be applied equally to a first or target culture. Further, he argues that scripts facilitate an insider's perspective and enable learners to see how keywords and cultural discourse practices are grounded in cultural values. Also, Cameron (1994), reviewing Wierzbicka's work has clearly stated that this approach "maybe used by language instructors as a tool for

explicating for interactional meaning for difficult linguistic items" (p. 339). This suggestion is supported by MacLaury (1997: 630) who concludes that some of Wierzbicka's work provides "brilliant aids to research and teaching".

From the above provisional outline of cultural scripts for the six words, it is clear that neither the conventional translation nor NSM alone can precisely illustrate their meanings. It would be the best if the two were combined together. The best way of teaching and learning specific cultural words is when both of the methods can support each other, that is, using the NSM to explain word connotations and discourse, but using prototypical translations as 'codes' for the denotations of cultural key words.

Nevertheless, to have a starting point and end point to create the formula for a word concept can be extremely difficult and still far from precise as the six provisional examples show above. Therefore, it was hypothesised that instead of writing the cultural scripts directly from the word, starting from sub-scripts of the components may be more helpful to decide the starting point and avoid the possibility of circular explanations. These subscripts could be verified by native-speakers' judgements (see main Phase II study below). In other words, where proponents of the NSM approach use introspection and their personal knowledge of target language to devise scripts (perhaps cross-checked with informants, though this is unclear in their publications), the present study attempts to work with a substantial sample of native speakers, composed with smaller samples of learners of Mandarin and non-Mandarin, to establish meanings and overlaps between the six keywords. This will be done using the notion of definitional elements (potential subscripts). The results of this investigation can then be used to validate, modify or improve the above tentative cultural scripts. This approach to working within the newly emerged NSM tradition to lexical analysis appears to be new.

After showing the target cultural keywords in this study, the following section intends to describe the detailed research process and design of the Phase II study.

8.3 Research aims

The research assumption in Phase II is that when the gap of the conceptual meanings between cultural keywords (as understood by native speakers compared to others) is significant, the words can be difficult to learn, and the vocabulary learning strategies adopted to learn them can be different, i.e. the ways of learning cultural keywords are different (1) from learning vocabulary in general, and (2) between the Chinese native speakers and British learners of Chinese or British non-learners of Chinese. This study thus investigates whether there is an asymmetry of learning behaviours because understanding of concepts between two different ethnic groups of students when they learn or use their own or target language vocabulary may be different.

Detailed research purposes for Phase II are listed as follows:

(1) to compare the knowledge of six Chinese words held by CE and BM;

(2) to investigate the understanding of CE and BM regarding the links between the six words;

(3) to compare the British learners' vocabulary learning strategies for these six Chinese words with learning strategies suggested by CE;

(4) to relate the results of the comparison in number 2 to the findings identified in Phase I (which did not specify any particular target words).

8.3.1 Significance of Phase II

The significance of this Phase II study is based on a recognition of the importance of giving some concrete words to explore students' vocabulary learning strategies. Chinese cultural keywords were used in this study because of their underlying socio-educational values not only in traditional terms but also in modern development (Smith 1997; *The Economist*, 21st January 1995). The following discusses specific aspects of the significance of such an awareness and also includes a small post-investigation on the

influence of Confucian concepts of the six target keywords among 11 Chinese university students from Mainland China.[27]

8.3.1.1 A need to investigate specific target words when investigating vocabulary learning strategies

In the Phase I interviews, some learners found it difficult to state which new words they had learned recently, or to specify the vocabulary learning strategies they use. This may exemplify some lack of self-monitoring or self-awareness of vocabulary learning strategies. It may also be that in the absence of a specific target word, it can be difficult for some learners to quickly and precisely evaluate the vocabulary learning strategies in Phase I. Or it may be that results vary depending on exactly which words are in subjects' minds at the time of completing the questionnaire, and any particular words in mind will vary from person to person.

This indicates a need to conduct research using a questionnaire with the most significant (so far) strategies matched against a small but meaningful set of lexical items. The set of six Chinese cultural keywords can be used as such a set of target items.

8.3.1.2 Difficulties of giving examples of the cultural keywords

In the interviews of Phase I, both CE and BM had some difficulties to offer word meanings that they think are culturally different. For some students, there were many pauses, long periods of silence or simply non-committal replies when the researcher asked interviewees to give examples that have cross-cultural meanings. When interviewees were asked about such words, in general, there was a long pause even if they gave examples. This may reflect that such cross-comparison is less likely to be

[27] Students' viewpoints from Mainland China are worthwhile noticing in order to consolidate this study (although it was difficult for the researcher to conduct a larger scale investigation in this study). The significance of research values in this area is not only because of the huge number of the Chinese population, but also because of the Cultural Revolution period when Confucianism and neo-Confucianism were considered as old-fashioned beliefs and there was a need to be destroyed.

explicitly conscious. However, this did not necessarily imply that the subjects did not have ideas to answer the question, because when one or two examples were given first from one interviewee in a group, more examples and comments flowed from the other interviewees in the same group.

8.3.1.2.1 Chinese learners of English

In order to show the process of the response, several interesting interactions in the group interviews are extracted from the four groups as follows.

Group A

I: Can you try to think if there are any Chinese words which have different cultural concepts when you translate them into English?

Ss: [silent]

I: I mean the meanings are just very different between Chinese and English.

S1: *um...I don't know.*

Group B

I: Can you try to think of some Chinese words which are difficult to translate into English because there are different concepts, and meanings?

S3: "*ren qing wei*" (人情味). *I don't know the English word to translate it.*

I: Any other words like *ren qing wei*?

Ss: "*xiao shun*" (孝順) [pause]... "*li*" (禮), "*yi*" (義), "*lian*" (廉), "*chi*" (恥)[laughing].

Group C

I: Right, can you try to think of some Chinese words which are difficult to translate into English because the cultural meanings are different?

S1: *Maybe Chinese phrases. I think they are very difficult to translate into English.*

I: Do you have examples?

S1: *Um...like "jifeigotiao"* (雞飛狗跳).

S2: *Like sishu* (四書) [Chinese classics][S2 along with other interviewees were laughing].

Group D

I: Can you please think of some Chinese words which are difficult to translate into English as they have different cultural concepts?

S1: *"xiao shun".*

I: "*xiao shun*"[slightly raised the tone].

S1: *I asked many teachers and translators about the translation, but they couldn't explain it well, and only said that we have different cultures, so it's very hard to translate. But I believe there should be some other ways to translate it.*

I: So how do you solve the problem?

S1: *Sometimes I went to the translation centre, next door to this room. I think people there are good at translating. But last time I asked her* [one translator] *to translate it, she also didn't know how to translate it.*

I: If you think it's difficult to translate, and after you ask, you still don't get the answer, then how do you translate such words?

S2: *I think just choose some close words to translate it.*

I: So, for example, how will you translate "*xiao shun*" to foreigners?

S4: *"being kind to your parents"* [all laughing].

I: What if people keep asking you what do you mean "kind" [laughing]?

S4: *"taking care of your parents".*

The above interviews showed that Chinese students' cultural awareness of key cultural lexis may tend to be implicit. It is also interesting to note that there were laughs after students raised examples. Although there were no further explorations on this matter, there were two extreme possibilities of interpretation for this. On the one hand, 'laughs' may simply mean students' excitement after a long struggle of thinking of the key cultural lexis which in fact they can easily identify. On the other hand, it seems that the subjects in this study feel embarrassed to identify or define some classical concepts (like *xiao*). Although this study provided no further support for either way, it is perhaps worthwhile pointing to a possible modern transformation of some (if not all) Chinese key cultural lexis. However, such a transformation may not necessarily mean a lack of

awareness of key cultural lexis. A post investigation conducted in April 2000 through a written request (by email) explicitly focuses on the six key cultural words. It intended to explore how relevant students in modern China think the six Confucian concepts are by four criteria: in personal life, in daily working/professional context, in education, and in everyday social living. The email was firstly directed to one English teacher in Fudan University, China (PRC), and then she asked 11 of her students to write comments on the questions. Responses were thorough with illustrations of personal stories or criticisms, which may (to some extent) reveal Chinese native speakers' underlying knowledge or ideology which may be often (if not always) implicit as opposed to other interview results by asking them to offer the cultural keywords (Shen and Cortazzi 2000).

Six out of eleven Chinese students overall give crucial importance to the six cultural keywords. They believe that *"...Confucian concepts are totally having to do with our modern China, because we are not from any other way but the past. We are from our tradition."* They are *"the merits of Chinese"*, and they *"have been rooted in people's minds, and though sometimes they are not aware of them, they will perform according to them."* Four subjects were clearly aware of the importance of the six words, but also specifically distinguished some differential importance in different disciplines. For example, *"these Confucian concepts help one [to] be an honest businessman, a kind of citizen or a reliable friend. Maybe it can't directly act on one's being a successful business [or] well-known person, but it does influence one's being a real person, which means that he has an honest, kind, [and] sincere heart"*. They noticed that *"Confucian concepts such as 'ren', 'li', 'xiao', 'de', 'he', 'junzi' may be mentioned less and less, however, they are rooted in most people's hearts. They are influential in my making decisions and taking actions."* Despite the above positive influence of the Confucianism, there was also awareness of counter examples. One student wrote: *"In personal life, more and more people are violating the [perception]...At home, many sons and daughters disobey their parents by arguing with them, or even abusing*

them...It's comforting to see that, in everyday social living, Confucian doctrines work a bit better".

8.3.1.2.2 British interviewees of Mandarin

Similarly to the response of Chinese interviewees of English, British interviewees took time to think of examples. Some of them either said, *'there must be a lot... There are so many examples but we just can't think of any right now'*, or some simply said, *'I don't know, maybe I'm not very aware of the cultural thing.'*

Students in one group gave many examples of cross-cultural conceptual differences like the words, *"xiao* (孝 filial piety), *mian* (面 face), *renquan* (人權 human rights)*"*. In other groups, *"family relationship"* was also mentioned. One student in a group commented that Chinese culture is "*a hierarchy which is not as apparent in my culture,...".* Another student in the same group followed up that "*Chinese put more emphasis on the divisions within the family as such. Oh, yes, ...we just say I have a brother and if he's older or younger, well, what the heck!"* There were also two interesting examples relating to gender issues, like *nuli* (奴隸 'slave') and *duji* (妒忌 'jealousy'), both with the 'woman' radical which were labelled as a "*kind of dodge".*

When the BM were asked to give examples of Chinese words which have different connotations from English ones, many of them indicated words that usually have problematic translations. One student mentioned *mianzi* to explain the absence of an equivalent definition between Chinese and English. He said *"...my friend in Taiwan often said "haodiulian (好丟臉 losing face), and he would translate it as 'embarrassing', but I think it's a different concept in English, 'losing face' is different from 'being embarrassed'. So it doesn't translate very well."*

Shen (神) or *jinshen* (精神) which is often translated as 'spirit' in English is another example which was given by different groups of students. They mentioned that they

have difficulties in understanding the connection between these terms in the two languages. One said that "... *shen 'magical spirit', 'notional mind and soul and magical aspect all together". Originally classical certainly and then it transforms into various different things*". The researcher asked him whether it is not the same as in English. He replied, "*not quite, I suppose. You get most of these with words in religious differences--differences between Christianity and traditional Chinese religion*". Two Cantonese-English bilingual students commented about *jinshen* which is not explainable in English. One said *"... it doesn't really exist [in English]"*. He disagrees with the English equivalent 'spirit' for *jinshen.* He continued, "*We wouldn't use it like that. For me, I speak Cantonese I can understand what's going on, and grasp the ideas well but it's very difficult to translate it into English, and say that.*" Similarly, the other student pointed out that

> "... *'spiritual civilisation' -- that seems to me a concept which is incredibly difficult to translate because the standard translation is 'spiritual civilisation'. But if you say 'spiritual civilisation' in English, it doesn't have any particular meaning. The standard translation is 'spiritual civilisation' but it just sounds very peculiar in English but it keeps cropping up in Mainland texts.*"

When the researcher asked students what associations that they would think of for the word *jinshen*, they mentioned *'physical well being', 'mental and physical health', 'how you feel'*. In a way, these comments imply that one aspect of difficulty may occur when the translations are not understandable, especially when the meanings are basically culturally different.

One student pointed out some concepts in nature in Chinese literature which are different from English,

> *"I think it's the use of heaven/earth- use as part of nature. There are always lots of things about heaven. It's like an old way of looking at us as a part of religion and a part of nature or a part of something big. Whereas here we are very egocentric, kind of separate, individual, we don't see that we have much to do with the whole scheme of things. Oh, like the moon and the sun and all that".*

Another concrete example of the translating problem which causes some difficulties of understanding was explained by a student:

> *"... 'play' in English is a totally different concept to Chinese 'wan' (玩). When I read a passage in Chinese which has the word 'wan', there's no way I can translate that into English usually. I can't say 'I'm going into town to play'. I can say 'I'm going into town to have fun or to look for fun'. But I can't say 'I'm going to play' or I can't say 'let's go out and play' to some friends of mine, either it sounds very childish or it sounds rather dirty".*

8.3.2 Procedures of design

Procedures of design involved selecting the cultural keywords, deciding the instruments for investigating the six keywords' meanings, several steps of the questionnaire design, sampling and three pilot tests. Then, results of procedural pilot tests were used to reform the questionnaire design. The details are discussed as follows.

8.3.2.1 Step 1: Selecting test items for 'cultural lexis'

The process of selection of the keywords is summarised in 8.2.1.

8.3.2.2 Step 2: Deciding instruments for investigating word meanings

In deciding on an appropriate means of investigating native speakers' and learners' perceptions of the meanings of the six keywords, a semantic differential test was considered as one possible instrument. Such a test asks subjects to differentiate meanings of target keywords by making target connotations for a series of supposed binary opposite meanings and associations of target words (Osgood, Suci and Tannenbaum 1957). The totality of such associations is held to represent the concepts of the target words. However, this procedure uses lengthy binary lists of pairs of associated words to give scaled responses between opposite aspects of meaning for each target item. This would be difficult to administer and would seem artificial to the respondents.

Another possible instrument might use a polysemic technique to investigate the prototypical meanings of Chinese words by distinguishing polysemes by presenting systematic alternatives in sentences to respondents. Huang (1982, 1987), and Myers (1996a, 1996b) designed several sentences, each of which may stand for at least one aspect of the concept of a target word. This is also cumbersome and might seem artificial.

The design of this present study attempts to go beyond these two techniques. This study will construct prototypical models of the meanings of the terms based on both native speakers' and non-native speakers' scaled responses. The scaling system (in which subjects respond on a 7-point Likert scale) will facilitate respondents' co-operation in a questionnaire survey study. This seems better than simply asking about the meanings of the keywords with open-ended questions, since this would be likely to elicit few responses in depth. Overall, this phase of the study therefore, investigates both the perceived word meanings of the six keywords and likely vocabulary learning strategies used to learn them when learners encounter these terms as target concepts.

8.3.2.3 Step 3: Questionnaire design

8.3.2.3.1 Stage 1 of formulating definitional elements

After selecting the six cultural keywords, the first stage of designing the questionnaire was to establish the criteria for picking definitional elements. These elements (in English) could then be used with each keyword in the questionnaire (in Chinese) to establish how far respondents agreed that these elements were part of the meanings of the keywords. Four criteria were used as guidelines.

(1) Philosophical introductions, explanations in literature, cross-cultural philosophical translations, and cross-cultural studies which define any target items in English would be cross-checked to look for common elements of definitions. This is because the need to follow up Phase I requires using a second questionnaire both ways, with

Chinese learners of English, and with British learners of Chinese. To avoid the possibility of non-compliance (if subjects see the items as 'too obvious', or 'trivial'), it seemed better to select cultural words and their explanations which might well be recognised by subjects as being important, central to certain cultural concepts, and perhaps difficult to translate. These latter points might well engage language students' participation.

(2) Literacy primers for Chinese children which contain contextual explanations for children of key concepts. This is based on how native speaking children may learn the meanings of these words: frequent glosses might be candidates for definitional elements.

(3) Dictionary definitions would also be consulted as sources of meanings (learners of a target language commonly use these, too).

(4) Individual native speaker's insights would be drawn upon by using and discussing a pilot test with native speakers.

Several characteristics of the 12 selected definitional elements are listed as follows:

(1) 12 basic definitional elements are selected in advance after a general survey from the literature of English versions of Chinese philosophy, studies of cross-cultural communication, and definitions of dictionaries. They thus have the face validity of being likely to occur as common authoritative definitions of translations.

(2) At least two definitions out of the 12 items listed are two of the typical translations for at least one of the six keywords, and they overlap with potential definitions of another word or words.

(3) Pre-selection of the 12 definitional elements would make it easy for participants to give some sort of response but the procedure runs the risk that some of the 12 items will seem irrelevant or insufficient. In these cases, they can write their own definitions or comments in the open-ended items, or simply tick the "not sure" column.

(4) The benefit of asking subjects to scale their perceptions of the target meanings is especially to save time when they answer the questionnaire, and it facilitates data analysis afterwards. Arguably, it runs the risk of being somewhat artificial as a procedure (like the semantic differential approach). However, to the major group of the subjects (the Chinese students of English) the questionnaire layout makes a connection to English translations for each of the key terms. Translation as a skill, in general, is in fact part of the students' undergraduate programmes for language study in Taiwanese universities. Most importantly, as the subjects in this study were from Language major and Education major backgrounds, and there were Chinese language centres in their universities which run courses to teach Chinese to foreigners, the procedure is likely to seem a reasonable one. Many of the students either were part-time tutors, or they easily made friends with foreigners who were learning Chinese language. Therefore, the subjects in this study may be supposed to have a higher level of awareness of translating than some other university students. It is hoped, therefore, that the translation aspect of the questionnaire is not seen as irrelevant.

(5) In the initial formatting of questionnaires, some of the definitions were placed in negative phrases, like the word *ren* 'does not include the moral sense'. The reason for this was to avoid the apparent bias of consistently positive statements. However, in a pre-pilot test, testees (see 8.2.4 for their backgrounds, and see first pilot test for more details) said they were confused by negative-scales in the questionnaire. In order to minimise confused judgements, or misreadings, therefore, the items were all modified consistently as positive definitions. Having positive definitions is likely to lead to reasonable results, as not all 12 items can apply for each keyword, so potentially some of the items should appear in the negative side of the scale for each keyword to reflect such necessary discrimination. Since all six keywords will be matched to all the definitions, all cross-matchings are potentially covered within the scope of the selective terms.

8.3.2.3.2 Stage 2: Formatting a questionnaire

The questionnaire consists of three sections, which are discussed in turn (cf. Appendix G). Like questionnaire A (in Phase I), there is a conventional part asking for brief details of subjects' background information before the main content in the Phase II questionnaire. After this, there are three main sections. Section 1 asks for subjects' judgements of the keywords and their translations. Section 2 is about whether those keywords are easy or difficult to learn. Section 3 concerns how foreign learners might learn these words most effectively.

Section 1 is to explore subjects' word knowledge. Subjects are asked to judge whether each of the listed items (termed definitional elements here) can be used to define or interpret the target words. The best layout for this part is to make some word lists; subjects can simply tick each item. This is fairly immediate, as subjects can get a quick overview of what is required and brief responses will suffice. Then open-ended questions after each target word gave the opportunity for more extended responses or for participants' comments.

Seven point Likert scales were used to test subjects' knowledge of the six words: *ren*, *li*, *xiao*, *de*, *he* and *junzi*. The words were presented in Chinese characters (and *Pinyin*) to Chinese subjects, in English to English speaking subjects.

Section 2: Please evaluate to what extent they are hard or easy to learn.
The second section asked subjects to consider each keyword in turn and to evaluate the likely degree of difficulty foreign learners might have in learning it. The 5 point scales are: very difficult, difficult, neutral, easy, and very easy.

Section 3: How do you think of the efficient ways to learn them?
The third section asked subjects to evaluate potential vocabulary learning strategies for each target keyword. 17 items were selected from the results of Phase I study which

were considered the most frequent and efficient methods to learn vocabulary of French, Chinese and English (see Chapter 6). These were listed for subjects to consider in turn in relation to each keyword. This approach avoids the use of a much longer questionnaire, which would have been necessary if all the strategies from Phase I had been included in Phase II. Items not selected for Phase II are not likely to yield potentially robust or interesting results.

8.3.3 Pilot tests

Subjects for this part of the study were university students or students in teacher training courses. There are two different groups: Group 1 are Chinese native speakers who were learning English (CE); Group 2 are British learners of Mandarin (BM) (see main Phase II study for the exact number of subjects). Group1 and 2 were given the same questionnaire (with Chinese characters and *pinyin* for the keywords). This questionnaire was intended to test subjects' differential understanding of the Chinese words.

Comments about the Phase II questionnaire were gathered when subjects were answering the questionnaires. These spontaneous, unsolicited comments were noted, and will be discussed together with interview comments.

8.3.3.1 First pilot test

To conduct pilot tests for the Phase II questionnaire was quite necessary, as there seems to be no published research which uses this way to investigate word meanings. The researcher in the first pilot test had to be with the respondents while they were completing the questionnaires in order to find out if there were any questions they might raise, and to ascertain any difficulties in giving their responses.

In order to finalise the draft of the questionnaire, 2 Chinese native speakers from Taiwan who were studying for an MA course in TESOL at Leicester University in

1997. Their comments for Part 1 were quickly summarised while they completed the questionnaire. Comments are listed below.

(1) It is not too easy to answer the questionnaire even for native speakers, because it is difficult to clarify the exact definitions of the target words. Nor was it easy to confirm the agreement or disagreement for each item, as many items looked so similar.

(2) Yet for each item it looked superficially possible to be able to define the six target keywords.

(3) It was confusing to make judgements when there were negative items.

(4) The item "gentleman" for some aspects of the word seems to be gender-biased, as it only refers to a man in Confucian terms.

(5) One testee wondered if everyone would have similar judgements.

(6) A Chinese testee remarked that *xiao* is the foundation of being a human being. Her parents told her to judge people by observing if the ways they behave is *xiao*. If they are, then s/he is trustworthy.

In Part 2, one of the Chinese testees wrote in the open question in reply to her own opinion about Western students' learning. She noted that "On the whole, it is not really difficult to know the general meaning [of the six words], but this might be merely the superficial understanding". She suggested a way of learning these words by providing background stories, because these words are so difficult to translate. She wrote that "*...Actually [the six words] can neither be translated completely nor be explained directly*". When she was asked why she put *"strongly disagree"* for three strategies [*using a dictionary, example of use, vocabulary cards*], she said "*because these words are difficult to translate, and there are not very good translations in dictionaries... Vocabulary cards can be useful for drawing pictures besides the word, so they can be helpful for learning concrete words. For these six words it is not possible to draw any pictures on cards.*"

8.3.3.2 Second pilot test

A second pilot test involved 6 Chinese students in the UK to test re-formulated items without any negative statements. These six students were volunteers (2 from Singapore, and 4 from Taiwan). Although they were from diverse Chinese backgrounds, the main purpose was simply to ascertain their comments on the design of the questionnaire, especially in Section 1 about testing word knowledge, and the time they spent to complete each section.

These respondents completed the 12 items in Part 1 faster than the subjects in the first pilot test. They said that the questionnaire was difficult, because they had to consider if each item was applicable for that target word, and to recall what they had learned from the Chinese classics. Some mentioned that they were not very certain of the best way to define the word, as the concepts of some words are very wide; it was difficult to think of a proper English equivalent for the Chinese word. Some said that their uncertainty was because of their poor knowledge of Chinese classics.

8.3.3.3 Third pilot test

In a further pilot administration of the questionnaire the order of the 12 items in the second pilot test was changed. It was conducted with 28 university Chinese students in Mainland China. The main purpose was to obtain the picture of the validity of the design, and to confirm that the order of the 12 items would not affect the result of the study. This pilot test was administered by an experienced British researcher, who was visiting China.[28] This was a good opportunity for a further pilot test, as it involved more Chinese native speakers in a Chinese environment. None of them had been outside China.

[28] Thanks for Dr. Martin Cortazzi's help to conduct the questionnaires in Mainland China during his visit there as a teacher trainer. Meanwhile the researcher was testing the other pilot tests of Phase II in the U.K.

The system of analysing the third pilot test is to code the missing value as '0' for 'unsure' or 'no idea', and as '9' for 'no response'. Counting 'no idea' as missing data seemed reasonable to avoid strengthening the side of the disagreement. 1 – 7 were then coded for 'strongly disagree', 'disagree', 'mildly disagree', neutral', 'mildly agree', 'agree' and 'strongly agree'. This facilitates statistical treatment.

The result of this test was put together with the results of the six testees in the UK. The first five items with higher mean scores showed that generally the definitions were all grouped within the top five options (see Table 8.3). The symbol 'X' after some items shows items that are not the same between the two groups. The two words *li* and *junzi* displayed the most differences. *Ren* and *xiao* showed very few differences between the two groups. One can reflect that the differences were due to the different nature of the two groups in the second and third pilot tests. For example, it may be because there are different perceptions towards the two words, *li* and *junzi* due to students coming from different Chinese regions. Or, it may be because of the nature of the two words that it is more difficult to find a basic agreement either in Chinese or in English translations.

Despite the above assumptions, this pilot test showed that there was only a slight possibility that the order of the 12 items might influence the validity of testing. That is, it was unlikely to have the effect that the first items would have the highest mean scores. So the final version questionnaire design was ready for the main investigation of Phase II (Appendix G).

Table 8.3: Chinese native speakers' strong agreement with various definitions of the key words (Pilot Study)

	Chinese in China (N=28)	Chinese in the UK (N=6)
ren	1. sense of morality 2. is a virtue 3. kindheartedness 4. humanity 5. gentleman-behaviour (X)	1. is a virtue 2. humanity 3. kindheartedness 4. sense of morality 5. with courtesy (X)
li	1. is a virtue (X) 2. gentleman-behaviour 3. sense of morality (X) 4. with courtesy 5. filial piety (X)	1. with courtesy 2. reciprocal harmony (X) 3. gentleman-behaviour 4. propriety (X) 5. moderation (X)
xiao	1. is a virtue 2. filial piety 3. morality 4. humanity 5. obedient manners	1. filial piety 2. humanity 3. morality 4. obedient manners 5. is a virtue
de	1. morality 2. is a virtue 3. gentleman behaviour (X) 4. humanity 5. courtesy (X)	1. morality 2. is a virtue 3. humanity 4. kind-heartedness (X) 5. propriety (X)
he	1. reciprocal harmony 2. morality (X) 3. is a virtue (X) 4. gentleman behaviour 5. moderation	1. reciprocal harmony 2. kind-heartedness (X) 3. gentleman behaviour 4. moderation 5. with courtesy (X)
junzi	1. morality 2. with courtesy (X) 3. filial piety (X) 4. humanity (X) 5. gentleman	1. gentleman 2. morality 3. propriety (X) 4. kind-heartedness (X) 5. with virtue (X)

X: differences across two groups

8.3.4 Design of the main study

Although this is termed as the main study in the thesis, Phase II is still in its early stage of development. Table 8.4 shows that a substantial number of subjects was obtained for Chinese learners of English (CE), but not for the other group, British learners of Mandarin (BM). This was the main research difficulty in this Phase (see next section for details).

Table 8.4: Overview the Phase II subjects

CE	BM
N= 153	N=34

8.3.4.1 Chinese learners of English

153 Chinese native speakers were involved in Phase II. They were all university students in Taiwan who were mainly English-major students. They were, in particular, supposed to have attained an advanced level of both English and Chinese, as most of the subjects were from national universities, which demand a higher standard of overall grades for the National University Entrance Examination. It was relatively easy to find subjects with an interest in participating in this research. Some tutors even made some of their teaching sessions free for the researcher to contact their students face to face. Most importantly, most students showed interest after the researcher had explained the purposes of the study; they showed confidence to demonstrate their own cultural knowledge. They said they had sensed the difficulties of using English to translate such key terms in the Chinese cultural heritage, so they would like to make a contribution to help the researcher.

However, while the subjects were answering the questionnaire, they found that it was not as easy as they originally thought to make judgements, as most of them believed they understood the concepts of the words, but they still had difficulty in defining them properly. It was difficult for them to make quick and precise judgements. Therefore,

they felt that they had to really think deeply, and tried to reflect on the possible definitions they might have learned. Some of them asked if they could use a dictionary to confirm their answers. The researcher had to assure the subjects that the main purpose was not to test if their answers were correct or not.

8.3.4.2 British learners of Mandarin

To find enough British learners of Chinese to do this test was far more difficult. Many of the British university departments which teach Chinese were contacted - most were unable to take part; others did not reply even after several request letters were sent. Finally, only 34 British students were able to participate.

The difficulties resulted from the two main reasons. One was the difficulty to obtain permission for a second access from the universities which had participated in Phase I. Only Durham University, could provide such second access. Fortunately, two other universities, Newcastle and Cambridge Universities, which had not participated in the Phase I study, could participate in Phase II. Another limitation for getting a large number of subjects was that not all the subjects who are learning Chinese could be included. Some were relative beginners. After showing the students the six words, if they could not recognise most of the words, they were not asked to complete the questionnaire, because it was deemed that, as obvious beginners, their knowledge of Chinese would not be sufficient to be included as learners of Chinese. Therefore, to conduct the Phase II questionnaire, the researcher had to approach each of the respondents separately. Also, through the pilot test, the researcher had learned that some subjects needed to have more guidance about how to complete the questionnaires.

8.4 Evaluation of the design and conclusions

From the description of the questionnaire design, it is clear that this study uses Chinese as a starting point to make a cross-cultural comparison. It is then questionable whether the study is bias-free. Clearly, it may be harder for British respondents to respond to the

test items, as 9.5.2.2 will show, a few British respondents reported some difficulties understanding the differences between the meanings of the six cultural keywords. However, they all completed the questionnaires and while there might be an argument that this weakens the validity of this Phase II questionnaires, this does not seem to be the case as these few respondents clearly had some understanding of all the words. Ideally it would have been better if some English-cultural keywords could be included, and if the size of the English group had been larger. Nevertheless, regarding the former weakness, using a Chinese NSM may be technically difficult, but ethnocentric bias can, it is claimed, be avoided. As for the latter weakness, due to restriction of the time and the co-operation from the institutions, the teachers and the students, this part of the plan had been forseeably difficult.

There appear several comments on the difficulty of filling in the questionnaire. However, this difficulty may not simply arise from the design of questionnaire *per se*, but it shows a deeper problem of conducting a cross-cultural research study. Firstly, it results from the difficulty of describing what one knows about the meanings of a word, because one's semantic knowledge may be stored widely and fuzzily, which is difficult to describe explicitly. Second, the twelve English definitional elements are not NSM terms, which may lead to an argument of ethnocentrism, since they derive from translations from Chinese. However, such definitions may be found in dictionaries and books and they are widely used, in English, in discussions of Chinese culture, education and communication.

Despite these limitations, as an exploratory study, the result may be interesting to see any asymmetry between the groups. The next chapter reports on the process of analysing the data, and discusses the findings.

CHAPTER 9

DATA ANALYSIS OF THE MAIN PHASE II STUDY

9.0 Introduction

This Phase II study consists of both quantitative and qualitative data. The quantitative data are used for three purposes. First, they are used to explore the possible networks and dimensions of the perceived meanings of the selected six cultural keywords as rated by the Chinese university students who were learning English, and British University students who were learning Mandarin, respectively. As already introduced, these perceptions of meanings are investigated in terms of 'definitional elements'. Second, the data are used to ascertain the perceptions of the two groups regarding the difficulties for learners of Chinese to learn the six target words. Third, the data are analysed to show the two sample groups' beliefs about how the six words should be learned by such learners.

Qualitative data are used to supplement the quantitative data. These qualitative data include respondents' definitions in English of the six keywords and their recommendations about ways of learning them, given in their own words. These responses were written in the open questions of the questionnaire. These data were used to generate participants' meanings and definitions of words, and then to interpret part of the quantitative data.

First, this chapter reports on the process of analysing the data, including the system of coding the questionnaires, and methods of analysing the data. Results will then be presented and discussed.

9.1 Data analysis

The coding methods and the analysis methods in this phase of the study in general follow a similar coding system and method of analysis as Phase I (see Chapter 6). This section briefly describes them in relation to this second phase of the study.

- **Coding system**

In the first part of the questionnaire of Phase II, following the coding system in Phase I, scores of '1' = 'strongly disagree', '2' = 'disagree', '3' = 'mildly disagree', '4' = 'neutral', '5' = 'mildly agree', '6' = 'agree', and '7' = 'strongly agree were assigned respectively. 'No idea' was given '0' for 'missing value' to reduce a possible negative effect on the more straightforward answers. Any missing data were coded '9'. Therefore, there were two categories of missing values in this analysis. In Part 2 and 3 of the questionnaire, there were 5-point scales, so scores of '1' to '5' were given for 'highly difficult/disagree' to 'highly easy/agree'. Thus, in all parts of the questionnaire, higher mean scores will imply stronger agreement from subjects with the given statements, and low means will imply disagreement. All the data were input into SPSS programmes (version 6.0) for Windows 3.1 for analysis.

- **Overview of the analysis methods**

Several methods of analysis were used to explore subjects' responses to part one of the phase two questionnaire. First, simple descriptive statistics were used to obtain mean scores and standard deviations for each item; this will help to ascertain widely agreed responses to definitions from the whole group for each keyword. Second, a factor analysis was run to seek underlying relations between items. This was considered important because otherwise the subjects' responses to each definitional element would be considered in isolation, whereas it is quite likely that subjects might treat such elements in combinations. Cronbach's reliability test will be used to check the reliability of each factor obtained from the factor analysis.

In Part two of the questionnaire, an independent t-test was run to investigate the statistical significance of any differences between the mean scores for the two groups' perceptions of learners' difficulties with the six words and of the efficiency of the 17 listed ways of learning them. In order to further investigate the nature of any differences of the subjects' evaluations of the ways of learning the six words in part three, a second factor analysis was employed to explore possible underlying structures. Another t-test was used to further check the reliability of any emerging underlying constructions from the factor analysis. Discussion of these methods has already been introduced in the report for Phase I.

9.2 Analysis of the six Chinese cultural keywords

9.2.1 Agreements on the definitional elements of the six keywords

As an initial exploration of these data, mean scores were calculated for the subjects' perceptions of the meanings of the keywords in terms of the definitional elements provided in the questionnaire. Statistically, when calculating mean scores using a 7-point scale, it seems to be reasonable to regard a mean score of 4.0 as a cut off point to divide the negative and positive responses. However, here the more stringent mean score of over 5.0 was treated as generally indicating positive responses. There are two reasons for this.

(1) When examining the questionnaire, the 7-point scales stand for 'strongly disagree', 'disagree', 'mildly disagree', 'neutral', 'mildly agree', 'agree', and 'strongly agree'. Therefore, if a mean score 4.0 (or under 5.0) was picked to distinguish high from low scores, it may mean that quite a few responses fall on 'neutral' and 'mildly agree' categories. Therefore, the result may not represent strong agreement as a whole (standard deviations are normally referred to when giving a general picture of data spread, and these will also be presented). In order to limit this possible effect of some subjects' borderline judgements (between 'neutral' and 'mildly agree') on the scores for the whole group of subjects, it was thought necessary to select the higher mean score.

(2) It was considered important to have a strictly higher mean score as a cutting off point in this investigation since all 12 questionnaire items (the definitional elements) for each word were formulated in a positive format. Thus, using a more stringent criterion for high scores might counter a possible bias in favour of positive scores, in the absence of negative statements in the questionnaire. Even if this system looks arbitrarily strict, as long as the analysis has been carefully constant, this would not be considered problematic.

These high mean scores for potential translations or definitional elements (i.e. using subjects' agreement with the definitional elements of the words offered) are presented in rank order for each of the six target words in the following Tables. The order of the higher mean scores (over 5.0), which imply general agreement that the definitional elements are appropriate, and standard deviations were summarised into two separate tables. Table 9.1 displays results for CE; Table 9.2 for BM.

9.2.1.1 CE 's commonly agreed meanings of the keywords

Table 9.1 shows the results of the analysis for CE. In two ways these results seem remarkable. First, this table shows that there are a range of definitional elements, for each keyword, which receive high agreement on the stringent scoring system used here. Thus, in these responses from Chinese speakers, it is clearly not the case that there is some one-to-one match between the original Chinese terms and a single definitional element. Yet, as discussed earlier, much of the literature in English regarding these keywords seems to suggest such a match; many translators settle for a single term to translate each keyword without discussion of multiple meanings in the lexical set investigated here.

Table 9.1: Chinese native speakers' strong agreement with various definitions of the six words.

ren	*li*	*xiao*	*de*	*he*	*junzi*
1. kind-heartedness (M=6.4, SD=0.85)	1. gentleman-like (M=6.42, SD=0.71)	1. virtue (M=6.38, SD=0.77)	1. virtue (M=6.29, SD=0.81)	1. harmony (M=6.10, SD=1.22)	1. gentleman-like (M=6.49, SD=0.76)
2. virtue (M=6.09, SD=0.94)	2. virtue (M=6.09, SD=0.79)	2. filial piety (M=6.12, SD=1.25)	2. morality (M=6.24, SD=0.82)	2. virtue (M=5.78, SD=1.10)	2. morality (M=6.19, SD=0.89)
3. morality (M=6.03, SD=1.01)	3. courtesy (M=6.09, SD=1.21)	3. morality (M=6.11, SD=0.99)	3. gentleman-like (M=5.83, SD=1.07)	3. gentleman-like (M=5.63, SD=1.22)	3. virtue (M=6.13, SD=1.00)
4. gentleman-like (M=5.74, SD=1.15)	4. harmony (M=5.84, SD=1.21)	4. humanity (M=5.85, SD=1.23)	4. kind-heartedness (M=5.53, SD=1.24)	4. moderation (M=5.39, SD=1.09)	4. courtesy (M=6.00, SD=1.11)
5. humanity (M=5.70, SD=1.30)	5. propriety (M=5.80, SD=1.32)	5. obedient manners (M=5.54, SD=1.36)	5. propriety (M=5.26, SD=1.48)	5. morality (M=5.31, SD=1.31)	5. propriety (M=5.94, SD=1.04)
6. harmony (M=5.37, SD=1.29)	6. morality (M=5.69, SD=1.09)	6. propriety (M=5.37, SD=1.39)	6. moderation (M=5.25, SD=1.22)	6. kind-heartedness (M=5.30, SD=1.15)	6. moderation (M=5.93, SD=1.06)
	7. moderation (M=5.55, SD=1.17)	7. gentleman-like (M=5.13, SD=1.52)	7. harmony (M=5.23, SD=1.55)	7. propriety (M=5.17, SD=1.17)	7. kind-heartedness (M=5.87, SD=1.11)
		8. kind-heartedness (M=5.12, SD=1.65)	8. humanity (M=5.16, SD=1.53)	8. courtesy (M=5.02, SD=1.33)	8. harmony (M=5.86, SD=1.24)
		9. moderation (M=5.08, SD=1.37)	9. courtesy (M=5.00, SD=1.45)		9. humanity (M=5.67, SD=1.35)
					10. filial piety (M=5.34, SD=1.45)

(The table includes all mean scores over 5 on a 7-point scale. The higher the mean score, the higher the agreement achieved by the group as a whole.)

Table 9.2: British subjects' (Mandarin learners') strong agreement with various definitions of the six words.

ren	*li*	*xiao*	*de*	*he*	*junzi*
1. morality M=5.92, SD=0.93)	1. virtue (M=5.61, SD=1.41)	1. filial piety (M=6.00, SD= 1.26),	1. virtue (M=6.03, SD=0.94)	1. harmony (M=6.19, SD=1.10)	1. gentleman-like (M=6.39, SD=1.03)
2. virtue (M=5.90, SD=1.21)	2. morality (M=5.50, SD=1.22)	2. virtue (M=5.45, SD=1.50)	2. morality (M=5.93, SD=1.30)	2. virtue (M=5.50, SD=1.47)	2. virtue (M=6.00, SD=0.89)
3. humanity (M=5.54, SD=1.21)	3. obedient manners (M=5.43, SD=1.31)	3. morality (M=5.10, SD=1.65)		3. kind-heartedness (M=5.17, SD=1.24)	3. courtesy (M=5.78, SD=1.00)
4. kind-heartedness (M=5.12, SD=1.40)	4. propriety (M=5.37, SD=1.34)			4. morality (M=5.08, SD=1.61)	4. morality (M=5.76, SD=1.14)
5. gentleman-like (M=5.11, SD=1.37)	5. gentleman-like (M=5.29, SD=1.57)				5. propriety (M=5.53, SD=1.43)
	6. harmony (M=5.29, SD=1.27)				6. harmony (M=5.50, SD=1.19)
					7. obedient manners M=5.50, SD=1.34)
					8. humanity (M=5.48, SD=1.25)
					9. moderation M=5.10, SD=1.62)
					10. filial piety (M=5.10, SD=1.65)
					11. kind-heartedness (M=5.05, SD=1.16)

(The table includes all mean scores over 5 on a 7-point scale. The higher the mean score, the higher the agreement achieved by the group as a whole.)

Second, it is interesting to note the overlaps in these high-scoring definitional elements across the six keywords. Thus *ren*, for example, is apparently perceived by respondents to contain definitional elements which are also common to the other five target keywords. *'Virtue'*, *'morality'*, *'gentleman-like behaviour'*, agreed by respondents to be part of the meaning of *ren*, are also given mean scores of high agreement in all five of the other words. Similarly, *'kind-heartedness'* and *'reciprocal harmony'* have high mean scores for four other words, while *'humanity'* has high mean scores for three other words. In general, these overlaps in the high agreement of the appropriateness of the definitional elements can be taken to imply a general overlap in the subjects' perceptions of the meanings of the keywords, as expressed in the English uses of the definitional elements. This overlapping is further investigated below.

The last keyword *junzi* covers the widest range of high agreement with the definitional elements compared to the other five words: *'is a gentleman'*, *'includes a sense of morality'*, *'is a virtue'*, *'shows courtesy'*, *'shows propriety'*, *'shows moderation'*, *'shows kind-heartedness'*, *'shows reciprocal harmony with others'*, *'shows humanity'* and *'filial piety is one aspect of this'*. This apparent general inclusivity of the perceived meaning of *junzi* is supported by the mean scores of *'shows self-sacrifice'* and *'has obedient manners'* ; these are under 5, and therefore do not appear in the table, but they are quite close to 5.

Yet, in the case of *junzi*, the item has *'obedient manners'* may be related to further complexities in Confucian traditions, which may explain why these Chinese respondents did not give it the same degree of high agreement as they did with so many other definitional elements. It may be true that *'obedience'* tends to be a positive concept when considering group harmony in Chinese cultural heritages. However, in the Chinese classics it was not necessarily the case that a *junzi* should be obedient all the time to seek harmony. Confucius did not encourage a *junzi* to obey without considering the circumstances. He emphasised that a *junzi* should be harmonious but not blindly obedient. In other words, proper obedience

is contextualized; it has to depend on different occasions. Confucius said in Book XIII (23) of *the Analects*, according to Lau's translation (1979: 122), "*The gentleman agrees with others without being an echo. The small man echoes without being in agreement.*" Lau used 'agreement' to express Confucius' ideas about 'good man' (i.e. gentleman) and 'hypocritical man' (i.e. the small man), but the idea of potential disagreement is there, and can be related to Confucius' comments about not necessarily obeying a ruler when they are clearly wrong. Such subtle concepts may be rooted in many Chinese minds, but this needs to be further demonstrated in follow-up investigations. This discussion might give further support to the decision of choosing the mean score 5 as a cutting point, as the difference can only be revealed in a subtle way. Here the Chinese subjects judged the word *junzi* to embrace the widest range of definitional elements in the present data.

Since Table 9.1 also shows many other overlaps with high mean scores, this would suggest that it is worth exploring these data further to ascertain more precisely the nature of the relationships between these definitional elements. Section 9.2.3 reports such an exploration; the section uses these results to propose network models of these relationships as potential representations of speakers' judgements on the six target keywords.

As a further comment here, it is worth noting that the analysis of the high-scoring means and standard deviations of CE's responses did not intend to provide the precise, comprehensive picture of the respondents' word knowledge of the key terms. The present investigation cannot claim such comprehensiveness, since the analysis is mainly conducted on the subjects' responses to the proposed definitional elements and not to other likely meanings (but see section 9.5.1 below, which analyses subjects' open responses). However, this analysis has provided clear evidence to wonder why some conventional English translations for some of the six Chinese cultural keywords, like matching 'humanity' for *ren*, 'filial piety' for *xiao*, 'propriety' for *li*, and 'harmony' for *he*, are not confirmed by

highest means and least disagreement. In this analysis, such conventional one-to-one translations adopted by many, but not all, translators do not necessarily represent the most common or obvious translations of native speaking students and they are quite clearly not the only meanings. The very clear overlapping of highly agreed definitional elements seems interesting evidence to support a Chinese perception of complex relations between the keywords. This complexity is overlooked in many translations.

9.2.1.2 BM's perceived meanings of the keywords

Table 9.2 shows the high agreement in the mean scores from the responses of the British learners of Chinese in the first part of the phase two questionnaire. The two main points drawn from the results for CE's responses hold for this BM group also, but it is interesting that this is generally the case to a lesser extent. First, the numbers of highly agreed definitional elements of each word for this BM group were in general comparatively fewer than the ones of CE except for *junzi*. Second, there is evidence that there are overlaps of highly agreed definitional elements across the keywords, but to a lesser extent than for the CE group. Such a result might be expected due to the critical difference of Mandarin proficiency between the two groups, although there is no claim that BM are incapable of providing appropriate answers. Nevertheless, the results of BM suggest some degree of reliability of their perceptions of prototypical meanings, compared to the Chinese responses. This is supported by BM's inclusion of 'morality' and 'virtue' as two acceptable definitional elements for all six words (as CE did).

For BM, the word *ren* was found to elicit similar perceptions as with the CE group. The only excluded item not in BM's list (but agreed by CE) is *'reciprocal harmony'*. Also, the BM score for the word *li* shows high agreement with the definitional elements of *'virtue'*, *'sense of morality'*, *'obedient manners'*, *'propriety'*, *'gentleman-like behaviour'*, *'reciprocal harmony with others'*, which were all included in CE's list. For the words *xiao*, *de* and *he*, the BM respondents showed high agreement with a very limited range of definitional elements,

compared to CE's list. It seems that the aspects concerning attitudes and inner thoughts were not included. For example, there is high agreement that *xiao* is *'filial piety'*, *'a virtue'*, *'includes a sense of morality'*, but not *'obedient manners'* and *'kind-heartedness'*. This perhaps demonstrates very nicely some cultural differences between Chinese and British understanding of some meaning of this item. As far as British family relationships are concerned, it may not seem necessary to ask a child to be obedient without regard for his or her individuality. Overall, similar to the results of CE, the typical definitions for the words including *'humanity'* for *ren*, *'propriety'* for *li*, do not come to the top of the list. But interestingly, *'filial piety'* for *xiao*, *'virtue'* for *de*, *'harmony'* for *he*, and *'gentleman'* for *junzi* are the first rated agreed definitional elements, which are different from the results of CE. They are perhaps the most prototypical definitional elements that students of Chinese may learn or encounter, yet this group do not seem to have moved beyond such definitions.

9.2.2 Factor analysis of the CE's responses to the keywords

To take the explorations of these data further, it was decided to undertake a factor analysis of the responses of the six keywords. Such an analysis is normally used to explore any underlying factors which might relate across the six keywords or which might relate across the responses to the definitional elements, since 9.2.1 has shown that the CE had large numbers of high mean scores for the definitional elements of the six keywords. While BM had some spread and overlapping of definitional elements in their responses, but in less depth compared to CE (see Tables 9.1 and 9.2), a factor analysis might potentially reveal underlying factors in the Chinese responses which are not present to the same extent to the British group.[29] Alternatively, the factor analysis might reveal some underlying structures common to the two groups. From the point of view of teaching and learning Chinese, as well as to advance an understanding of the cultural keywords, such a

[29] As the main purpose of this part of the study is to show the possible difficulties translating the six Chinese cultural keywords, only CE's first factor of the responses of the six keywords will be analyses in detail. Whereas, to analyse factors of the six keywords for BM was not considered necessary, but they can be referred in the Appendix H and Appendix I.

factor analysis seems worthwhile. Factors extracted for the two different groups of subjects will be reported separately. First, the number of factors extracted for the two groups is shown in Table 9.3.

Table 9.3: The number of factors of the two groups

	Ren	*Li*	*Xiao*	*De*	*He*	*Junzi*
CE	4	4	3	3	2	3
BM	5	4	3	3	5	4

(CE: Chinese Native Speakers; BM: British Learners of Mandarin)

9.2.2.1 CE's factors of the six words

In table 9.3, both CE and BM have the same numbers of factors for the word *li (propriety)* and *xiao (filial piety)*, although this does not necessarily mean that the two groups have the same interpretations. For the word *ren, he* and *junzi*, the analysis shows that BM have more factors. In particular, CE have the least number of factors for the word *he (harmony)*, in either their own or BM's responses, whereas BM have the largest numbers of factors for this item (and for *ren* too). Moreover, the number of factors for *junzi* may show that BM have more, or different types of interpretations. Interestingly, this result was also obtained in the descriptive analysis of the mean scores reported earlier.

The following section discusses CE's first factor of the six cultural keywords in detail (shown in Table 9.4). This provides a general picture of CE's understanding of the six words. This answers one of the research questions that the translations of the cultural keywords can be problematic. Regarding other weaker factors of the six words, details can be seen in Appendix H and Appendix I. In order to make the structure of the factors easier to read, factor loadings below .30 are omitted here (empty squares in the Tables appear instead). Further, some initial attempts to name the factors identified here did not seem convincing so there is no attempt to name each factor. There is some general consensus that it is not easy to do this, and it may only present face validity (Kline 1994).

Table 9.4 shows that 'filial piety' represents the highest loading in the first factor of *ren*, and the second largest one is 'obedience'. Other substantial contributions to

this factor include 'courtesy', and 'moderation', 'propriety', and 'self-sacrifice'. This suggests that first, the main factor of *ren* reveals that *ren* consists of a fundamental aspect of the family relationships. Second, some conventional translations using single words in English, which intend to cover a more complete aspect of *ren*, may not always be successful or appropriate. This second argument also applies for the rest of the five words which will be discussed later.

Table 9.4: CE's first factor of the six cultural keywords

	ren	*li*	*xiao*	*de*	*he*	*junzi*
1. is a virtue						.38
2. includes a sense of morality		.37		.31	.32	.37
3. is gentleman-like behaviour				.61		.35
4. is reciprocal harmony with others	.38		.39	.48		.67
5. shows kind-heartedness		.75	.59	.33	.49	.70
6. filial piety is one aspect of this	.77	.72	.37	.56	.77	.60
7. is propriety	.59		.37	.74	.56	.85
8. includes moderation	.64		.78	.71	.59	.81
9. shows self sacrifice	.59	.64	.71	.55	.77	
10. is a person with courtesy	.66		.71	.86	.70	.66
11. includes obedient manners	.76	.68	.71	.70	.59	.35
12. is humanity		.73			.38	.33
Eigenvalue	3.06	2.95	4.35	4.47	4.05	4.77
Percentage of data-set variance	25.5	24.7	36.3	37.3	33.8	39.8
Reliability (all items) Alpha =	.76	.73	.81	.84	.79	.83
	(N=124)	(N=134)	(N=124)	(N=126)	(N=125)	(N=137)

Table 9.4 shows that the eigenvalue of the first factor of *li* (2.95) was not as strong as the ones of other five cultural keywords. The eigenvalue of the first factor of the other words (except *ren*) are all over 4. This may suggest participants' difficulty in making judgements of the twelve definitional elements for the word *li*. High loadings in the first factor of *li* show 'kind-heartedness', 'humanity', 'filial piety', 'obedient manners', and 'sacrifice'.

The first factor of *xiao* emerged from the four high loadings 'moderation', 'sacrifice', 'courtesy', and 'obedience'. Similar to the arguments of the previous two words, the typical translation of 'filial piety' does not construct the factor strongly.

10 out of the 12 loadings construct Factor 1 of *de*. This factor shows that a person of *de* shows 'courtesy', 'propriety', 'moderation', and 'obedience', and 'gentleman-like' behaviours. 'Filial piety', 'sacrifice', and 'harmony' were also substantially correlated with this first factor. It is interesting to note that 'virtue' and 'morality', which appeared to be the highest agreeable definitional elements (shown in Table 9.1), did not construct this strong factor. Again, this indicates that there is discrepancy of translation by using the frequent single or isolated definitional element rather than using a mixture of definitional elements or more complex explanations to derive more complete word meanings.

Only 3 loadings out of 12 do not correlate strongly with Factor 1 of *he*. As with the strongest features of *de*, the first factor of *he* is constructed by the elements of 'filial piety', 'sacrifice', and 'courtesy', followed by 'moderation', 'obedience', and 'propriety'.

Finally, Table 9.4 shows that the first strong factor of *junzi* is constructed by a wide range of the 12 definitional elements, all except 'sacrifice'. The highest loadings on this factor are 'propriety' and 'moderation'. 'Kind-heartedness', 'reciprocal harmony', and 'courtesy' are also substantial.

9.2.2.2 Discussions of the CE's first factor

Examining the patterns that CE show in the first strong factor in Table 9.4, surprisingly it was found that the loadings of this factor do not include the typical translations or definitions for the six cultural keywords, and such results are reliable (as reliability alpha scores are all above .70). For example, a prototypical component like 'humanity' does not construct the factor of *ren*, and 'propriety' does not compose the factor of *li*, and so on. Looked at another way, to use a single commonly quoted translation into English for any of these keywords seems to accord so little with the judgement of these native speakers, shown by factor analysis, that it amounts to a kind of cultural bias. Such a finding may suggest, first, more evidence of the inadequacy of using these single terms to translate the

six Chinese cultural keywords. Second, the conceptual boundary of the six words is wide for Chinese native speakers, and very rarely can any of the English terms stand on its own to construct the meanings of the six words. This reinforces the conclusion from the evidence presented earlier, that there are very many overlaps in the Chinese responses to the definitional elements. The conceptual boundaries seem both wide and overlapping.

However, to sound a note of caution in these conclusions, there is arguably a possibility that since these 12 definitional elements were written in English, there are cultural gaps of interpretation among Chinese respondents when using these terms, since the terms themselves are obviously Chinese. However, as pointed out earlier, the Chinese subjects are used to thinking about translations into English and are required to do this in their university courses. Yet, it is perhaps easier for Chinese respondents to identify some other aspects that these words may cover; any further aspects they put forward are analysed later (in 9.5).

However valid the above argument, this study has also demonstrated how these six Chinese words' meanings may come from the multiplicity of definitional elements, rather than from any single one. The strong loadings of each first factor underline the principle that the six words in general consist of a network of complex and overlapping meanings, which is not easily captured in many common translations and which probably represents some of the difficulty that learners of Chinese may have with learning such keywords.

Factor analysis is used to find out underlying perceptions and knowledge regarding the meanings of the keywords, as shown in the analysis of responses to the questionnaires. The patterns from this analysis showed unexpected several points, which is different from the background of the word translations and the results of the mean scores. However, the findings from the factor analysis were difficult to interpret or to gloss with a name for the outstanding factors, and seemed open to several interpretations.

To illustrate possible alternative interpretations of these results the following points can be made. On the one hand, it is not clear whether the concepts of the six words have gone through some process of modernisation, as might reasonably be expected in contemporary contexts, or localisation. In the latter case, as the native-speaking Chinese subjects were from Taiwan, there might possibly be a local contrast with Mainland China. However, this conceivable local factor might balance out possible modernization since in many cultural contexts Taiwan is arguably more conservative and traditional than mainland China. This conservative element is seen in the retention of traditional characters in Chinese script (though there may also be political factors in this) and in the continuous study of Confucian thinking and some Confucian texts in the Taiwanese secondary school curriculum (in contrast to Mainland China where students are strongly aware of this heritage but it has had fluctuating fortunes in the curriculum and is not strongly featured). On the other hand, it is not certain whether the subjects also had fairly fuzzy notions about the six words. That is, it is possible that these particular subjects had fuzzy notions, with overlapping meanings, rather than such complexity being a feature of the meanings of the set of terms themselves. And if their understanding of the six words remains loose, there is a possibility that their judgements may be misled by one of the 12 definitions which looked similar and generally applicable for interpreting and explaining all six words. While such an interpretation is possible, it does seem unlikely since the Chinese subjects are all native speaking adults, and, as indicated above, they would almost certainly have studied some aspects of Confucian texts at school and such texts feature the keywords very strongly. There is also a need for some caution about applying factor analysis to this type of the study. As Ho (1996) failed to find any logic from the factor analysis of dimensions of *filial piety*, he argued that "the result of the factor analysis could be nothing more than a mathematical artefact that has no clear psychological meaning" (ibid. 165).

Nevertheless, the value of the exploratory factor analysis used in this study is that it provides an opportunity to understand how the subjects respond to the questionnaire, and helps to explore some possible relationships between the 12 definitional elements that construct the meanings of the words. Exploring the clustering meanings of the cultural keywords and their cross-cultural differences demands further research. The definitional elements used in this study need further development using a wider range of potential elements offered and a more thorough and precise frequency count in order to obtain a more objective picture.

9.2.3 Overall findings and discussion concerning participants' knowledge of the six keywords: two models

In order to model the network-like connections of the six words, in a manner that might reflect the overlaps of the definitional elements which have already been revealed, this section has two aims. It attempts, firstly, to construct figures showing the emerging complexity of the hypothetical networks, and secondly, it presents overlapping maps of the six words based on the result of the mean scores of the two groups of subjects.

9.2.3.1 CE's and BM's semantic network models of the six keywords

The two figures shown below (Figures 9.1-9.2) are based on the previous results in Tables 9.1-9.2. A line was drawn to connect the target word with each definitional element, which had received subjects' stronger agreements, that is, with a mean score of 5.0 or higher.

The general impression on examining the two figures is that the CE's network is visually more complicated than the one of the BM. This may imply, firstly, that learners' cultural conceptual networks may be different from the key concepts and meanings of the target language held by native speakers. Secondly, it may also imply that the network of the cultural words may have different degrees of complexity of the networks between the target culture and the native culture. The network, however, would hopefully transform one way or another as students make greater progress in learning the target language and culture. Furthermore,

the network also reveals that some definitional elements are shared by different words. This evidence of speakers' perceptions of the CE and BM groups confirms the notion of overlapping definitions found in common translations (Chapter 8).

Figure 9.1: The hypothetical network of the six cultural keywords of CE

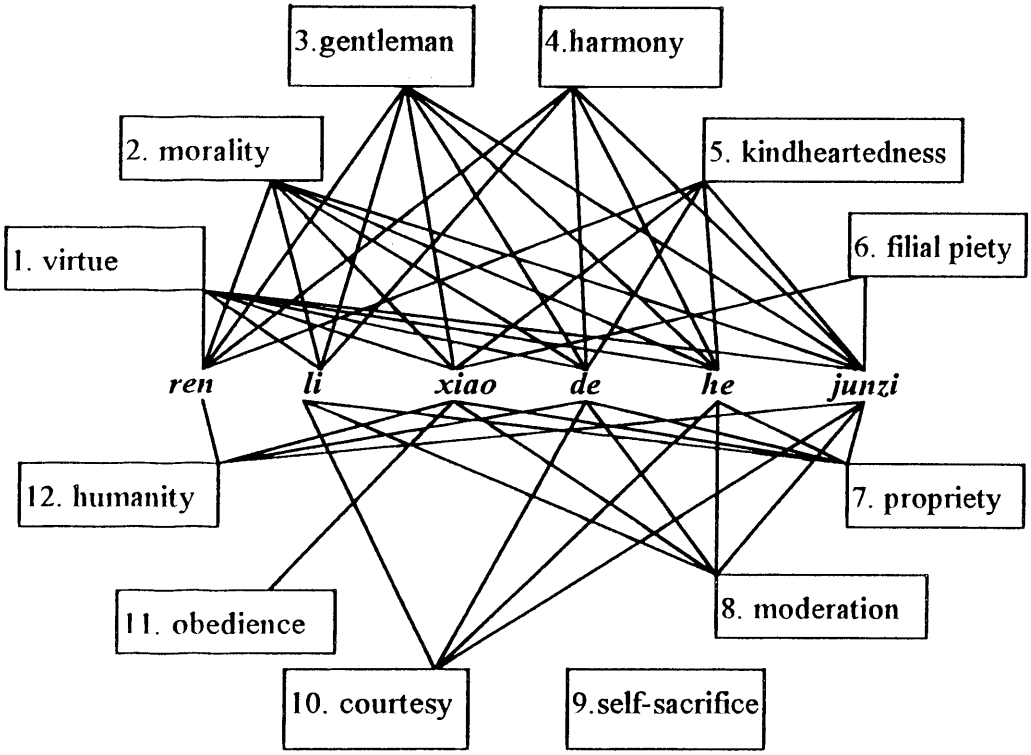
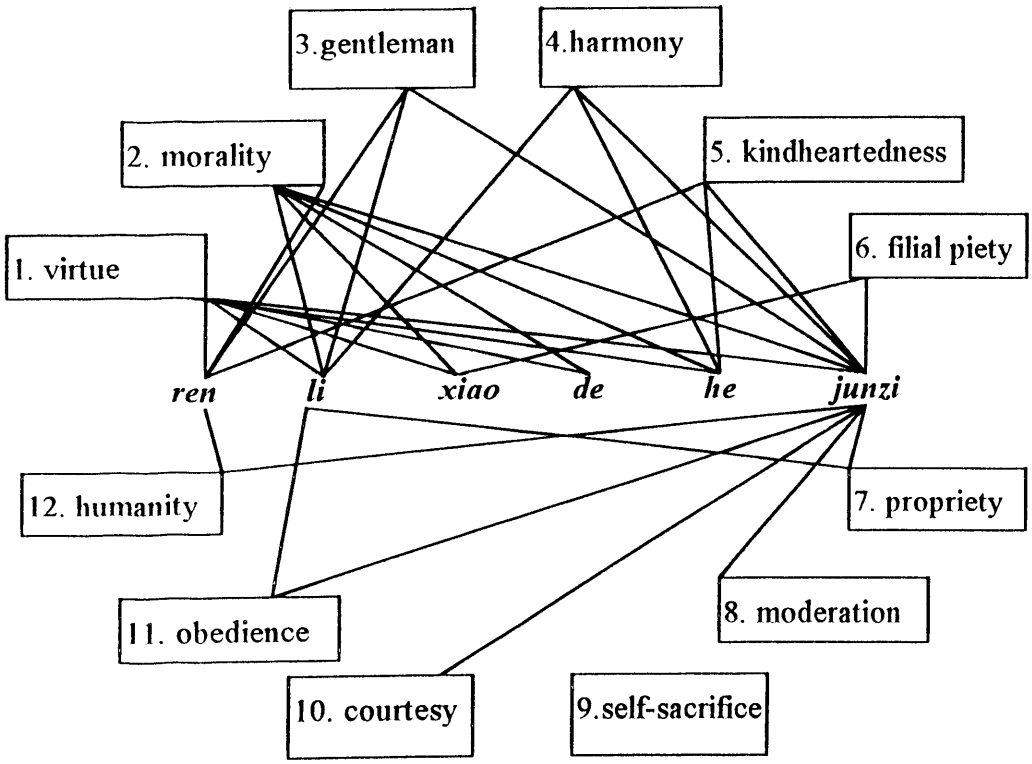


Figure 9.2: The hypothetical network of the six cultural keywords of BM



9.2.3.2 CE's and BM's Venn models of the semantic inclusions and exclusions of the six keywords

In order to explore further the range of the overlapping concepts of the six words based on the results of Table 9.1-9.2, other figures were drawn as mathematical Venn diagrams (see Figures 9.4 and 9.5). This gives a clear visual impression of overlap or inclusion in the perceived relations of the six target terms and the 12 English items. The overlapping models were drawn according to the results of the high agreement of mean scores for each group regarding inclusions of the definitional elements in the six keywords shown in Table 9.1 and 9.2. Each of the overlapping sections was drawn according to the commonality of definitions of each key word as highly agreed by the sample group. The resulting Venn diagrams show the extent of embedding or overlapping between the definitional elements comprising each keyword, reflecting common areas of high agreement within respondent groups (shown, as explained, by high scores from the Phase II questionnaire).

In theory, this looked simple to portray, but in reality, each of the Venn figures needed drafting over and over again manually, as it was quite complicated when there were six words to be taken into account altogether. By this demonstration, a quick impression is gained that some words consist of a larger space in terms of the concepts than others, that is, they are more inclusive of the definitional elements as agreed by respondent groups. The diagrams further clarify where there are overlaps and show the precise nature of the overlaps. In general, CE's concepts of the six words obviously overlap more than the BM's. They have more elaborate patterns of conceptual embedding. Each model is considered in more detail below, in terms of the definitional elements provided. It is recognised that if more elements were provided, the picture might change, i.e. to some extent these models depend on the number and nature of the definitional elements provided.

- **CE's overlapping model**

Figure 9.3 shows that *junzi* consists of the largest and most inclusive concept compared to the other five words. In other words, most of these cultural words are parts of the basis of *junzi*. The concept of *de* is also wide-embracing but to a lesser extent than *junzi*. *De* embeds some concepts of the word *xiao*. *He* also presents a wider concept, but not as wide as *junzi* and *de*. *He* does not include *'humanity'*, *'filial piety'*, and *'obedient manner'*, but it includes *li* and much of *ren*. *Li* and *ren* comparatively have smaller spaces of the concepts or definitions. In one sense, *li*, *he*, and *ren* are central to the whole conceptual system. The diagram also shows that *ren* and *xiao* are related but do not employ the definitional elements in the same manner. *Junzi* can be regarded as the embodied realisation of the other five keywords and of all the definitional elements, except that (using the criteria adopted) *'obedience'* is not part of *junzi*.

The definitional elements of *'virtue'*, *'morality'*, and *'gentleman'*, are core elements to all the keywords' meanings. This analysis and its representation in Figure 9.3 could be interpreted as showing that there is a possibility of merging the three definitional elements into a single core term. This is an interesting result which would lead to a considerable revision of the common English translations of the six keywords. Even more interestingly, the three core definitional elements do not seem to relate to any of the underlying factors deriving from the factor analysis, whereas they seem to be the core elements for CE but not the same for BM. *'Harmony'*, *'propriety'* and *'moderation'* are only slightly less central. *'Obedient'*, in contrast, is only part of *xiao* and is peripheral to the system as a whole.

Figure 9.3 nicely demonstrates how it is highly problematic to use what are here termed definitional elements as items in English for one-to-one translations of the Chinese keywords. As Chapter 8 showed, such translations have been common in a representative range of translations and discussions of the Chinese concepts in English. For example, to translate *de* as *'morality'* seems misleading when the

present analysis has shown that *'morality'* is central to the meanings of all six of the keywords analysed here. In other words, classic translations may often cover up the apparent native speakers' understanding that some terms have a superordinate nature in relation to others in the same lexical set. In order to distinguish one cultural keyword from another, it would be better to highlight this.

- **BM's overlapping model**

BM judged that *junzi* consists of the largest and most inclusive concept among the six words (see Figure 9.4), and this result is the same as CE's. *De*, on the contrary, has the smallest space, whose definitions, *'virtue'* and *'morality'*, are embedded in the other five words. While the BM apparently see *'gentleman'* as part of *li*, *ren* and *junzi*, for the CE, *'gentleman'* is at the heart of the system.

It is interesting to note that *'courtesy'* and *'moderation'* pertain only to *junzi*, and are much less central to the whole system, compared to the systems of the CE. Moreover, while CE's 'obedient' is only featured in *xiao*, BM's 'obedient' pertains to both *li* and *junzi*. Despite differences of the overlapping parts between the six words, the element 'filial piety' is only shared between the keyword *junzi* and *xiao,* which is the same as CE.

Overall, although there are few similarities of the overlapping patterns between BM and CE, the results of the BM shows that the overlapping parts between the six words are considerably less than the results of the CE.

The discussion so far has suggested that CE (who are all learners of English) generally have high agreement with larger numbers of definitional elements compared to the other group. The one exception is the word *junzi*, as BM have one more item of high agreement than CE.

Although it was not the intention of this study to examine how words' meanings are stored in subjects' mental lexicon, the result here indicates that CE as a whole have a more elaborate understanding of the six Chinese cultural keywords than

foreign language learners. A small but important difference emerges unexpectedly from this investigation. There is a very close correspondence between CE and BM with regard to their responses to *junzi*. This extra item shows that foreign language learners basically have less complete word knowledge, and at times, even false word knowledge (i.e. less native-speaker like) than native speakers. Nevertheless, it is interesting to find that CE did not always show some of the most typical definitions provided in dictionaries or books.

Figure 9.3: A representation of Chinese speakers' judgements of components of the six keywords

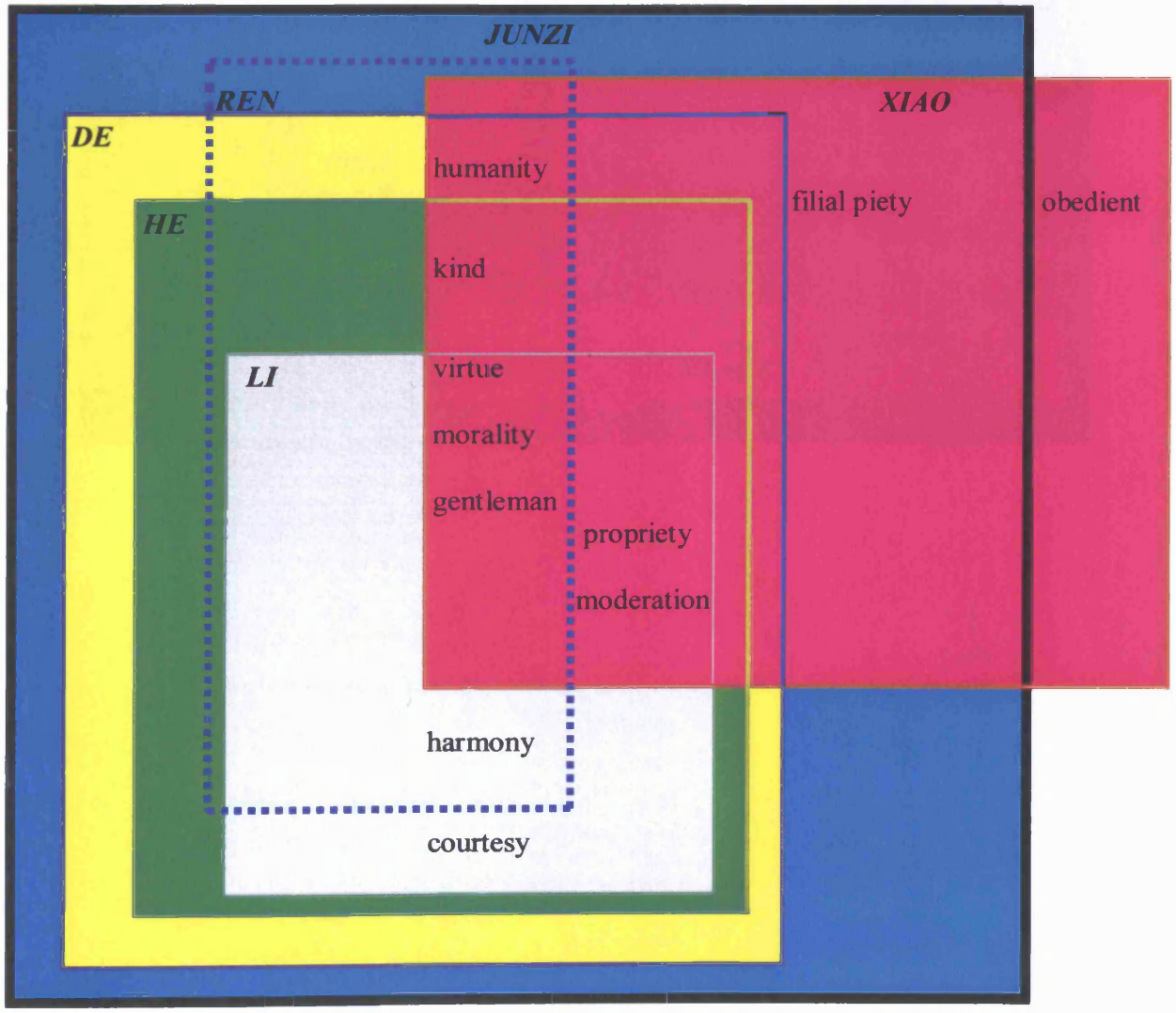
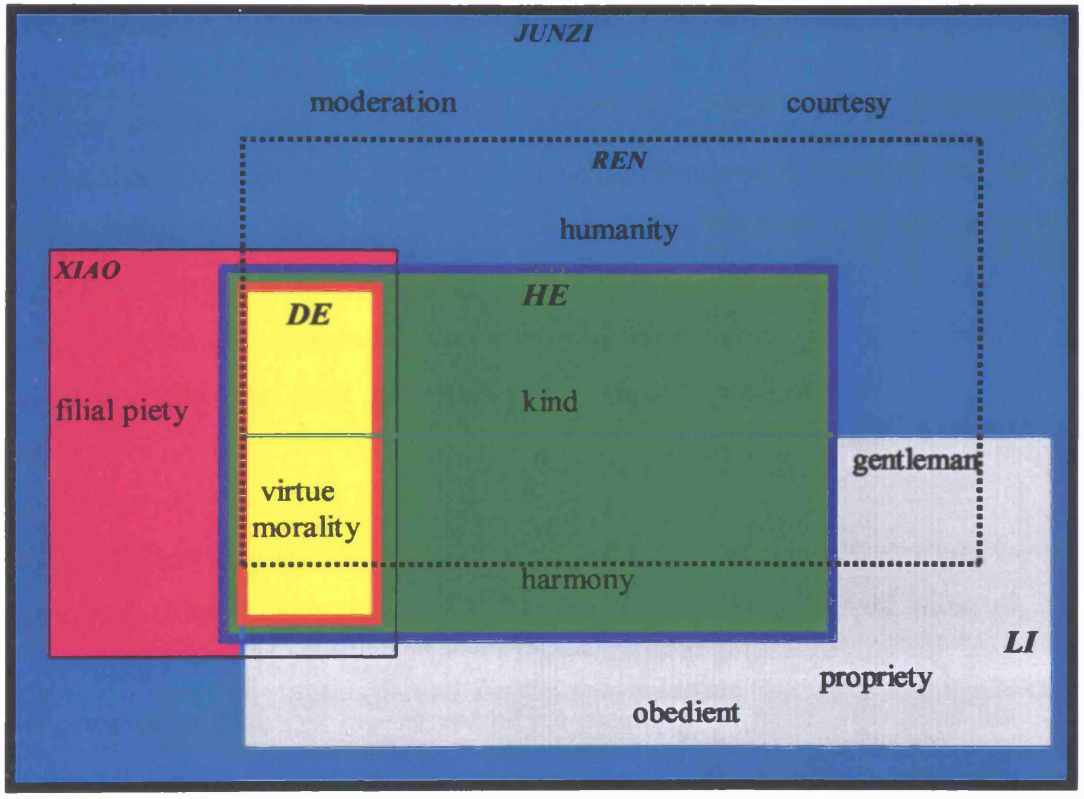


Figure 9.4: A representation of English speakers' judgements of components of the six keywords (Mandarin learners)



Moreover, the native Chinese speakers' diagram (Figure 9.3) is potentially useful to improve the cultural scripts initially developed in Chapter 8. The benefit of this model provides a research-based foundation to write, or improve, scripts, as scripts may be written for each definitional element, and combinations of the definitional elements for the six cultural keywords can be sequenced in a final script for each. This combining and sequencing can, of course, be based on the native speakers' representation (Figure 9.3) which is designed to explore overlaps, and therefore combinations, of the definitional elements. This new format of the scripts would carry the major advantage of being based on research of native speakers' understanding. For example, on the one hand, the final script for *junzi* will consist of formulae for 'humanity', 'kind', 'virtue', 'morality', 'gentleman', 'propriety', 'moderation', 'harmony', 'courtesy', and 'filial piety', but not 'obedient'. On the other hand, the final script for *xiao* will not include 'harmony' and 'courtesy'.

A quick illustration may start from the elements of *xiao*. The element 'obedient' is not shared with other 5 keywords, and 'filial piety' is only shared by one keyword *junzi*. To use the provisional script of *xiao* in Chapter 8, it is clear that this sub-script successfully illustrates one aspect of the meanings of *junzi*. This point has then sustained the questionnaire result. The scripts of 'filial piety' and 'obedient' that construct the meaning of *xiao* are as follows:

'Filial Piety'

A child does something good for his father/mother

Father/mother wants a child to do this.

A child does this.

People think this is good.

Father/Mother does something good for a child.

A child wants to do some good things for his father/mother.

A child has to think about his father/mother always.

If father/mother asks a child to do something, and a child can not do it, a child feels bad.
If father/mother asks a child to do something, and a child can do it, a child feels good.
People can say something good about a child because of this.

While *junzi* and *xiao* can share the script of 'filial piety', *junzi* can not share the script of 'obedient' with *xiao*. Therefore, the presence, or absence, of the 'obedient' sub-script can distinguish the otherwise similar scripts for *junzi* and *xiao*.

'Obedient'
Father/mother wants a child to do something.
Father/mother says to a child 'do something'.
A child wants to do this, a child does this.
If a child does not want to do this, a child does it because of this, people can say a child is good.
If a child does not want to do this, and does not do this, people cannot say a child is good, because a child is not this ('obedient').

But again this exploration encounters some difficulties in this study, since cultural scripts for the definitional elements have not yet been fully drawn up through English or Chinese native speakers. Further study may be necessary in order to develop more precise cultural scripts based on their insights. Nevertheless, this chapter has suggested that this procedure provides a research base for the writing of scripts. It has presented an example to show how this might work and has argued, with evidence, that this procedure is necessary in the case of lexical sets where element may overlap.

9.3 The analysis of the difficulties of the six words

This section presents the analysis of the next part of the questionnaire which explored the participants' perceptions of the difficulties which learners of Chinese might have in learning these keywords.

Table 9.5 displays results of a t-test. High means scores here signify that respondents regard the words as easier for foreign learners to learn. In all cases (except one, *de*) the means for the CE are higher than the corresponding means from BM. Higher mean scores in the group of the CE thus suggest that there is a tendency for native Chinese speakers to be more optimistic about learning the meanings of the six words than the BM, for learning Chinese as a foreign language.

Nevertheless, the standard deviations of the Chinese group scores may suggest that there are more extreme judgements within this group compared to the BM. This is perhaps because the concepts of these six words in fact embed various meanings in the existing literature (see Chapter 8). Therefore, this may imply that the meanings can be explained and defined differently not only because of different contexts, and ways of understanding the terms, but also because of different translators. Therefore, it may depend on each individual's idiosyncratic ideas of how the contexts flashed in their heads when they completed the questionnaire

Table 9.5:
Responses concerning the degree of the difficulty in learning the meanings of the words

	CE				BM	
	Mean	SD	t-value	P	Mean	SD
Ren (humanity)	2.77	1.35	-	-	2.36	1.08
Li (propriety)	4.02	1.11	-6.00	0.000	2.75	0.95
Xiao (filial piety)	3.53	1.37	-3.31	0.002	2.87	0.92
De (virtue)	2.80	1.28	-	-	2.82	1.13
He (harmony)	3.25	1.27	-	-	3.06	1.05
Junzi (gentleman)	2.91	1.43	-	-	2.90	1.08

1-5: very difficult-difficult-neutral-easy-very easy; BM=British learners of Mandarin;
CE =Chinese native speakers; P = Probability;
Sig.: * $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$; -: not significant

This might raise the methodological issue of whether the questionnaire should have included actual contexts or examples of use for each of the key words. These could be taken from classical Chinese texts or from contemporary sources (or both, as contrasts). On the face of it, this sounds like an appropriate refinement. However, this in turn raises the real difficulty of finding a typical context for these admittedly complex terms. As some English translations reveal, different Chinese contexts apparently give these words different shades of meanings, so it would be necessary to provide several contexts. Yet if several contexts had been provided, this would have added greatly to the length and complexity of the questionnaire. As indicated in Chapter 8, it was quite difficult to persuade subjects to fill in the questionnaire even with the present short version. There are so many contexts of potentially different nuances of meaning that it is difficult to see how contexts could be included without making this part of the questionnaire much more elaborate and, consequently, rather unwieldy to manage.

The t-test analysis shows that the responses concerning the difficulties of the six cultural keywords include highly significant differences between the two groups for the words *li (propriety)* and *xiao (filial piety)*. These differences reveal asymmetries. It is clear that CE regarded these two words as easy to learn (particularly *li* which notably has the highest mean score). But BM showed otherwise (BM are, of course, actually learning such terms in Chinese as a foreign language), whereas the CE responses might be considered hypothetical, since they already know the terms at native speaker level. On the other hand, CE considered *ren* is a difficult word to learn, and so is *de* and *junzi*, although the differences between the two groups are not statically significant (i.e. BM thought they were difficult, too). But BM scores showed that they considered it was hard to learn *xiao*, unlike CE. Similar arguments to those raised for *xiao* above, also clearly apply to *li*. There is no statistical difference for the word *he* between CE and BM. However, the CE and BM think that *he* is not difficult. Although there is no significant difference between groups for the item *junzi*, it is interesting to notice

that to learn this word may be difficult. This suggests that the words have their own complex meanings in English, or that they are not frequent or common words. This can support the results of a factor analysis that the structures of some words are not distinguishable.[30]

Although it was not the main focus in this study to find out all the details of the reasons of the perceived difficulties, the researcher managed to explore this briefly while the Chinese respondents were answering the questionnaire. The general picture was that they said they felt this word or that word was easy or difficult for foreigners to learn because the words had simple or complicated contexts in the Chinese Classics. Therefore, this research design is (if not perfectly) valid when a basic text survey has been done.

A future study can try to analyse perceptions of the degree of the difficulties of learning the word meanings at a deeper level. A further exploration of the students' and teachers' perceptions of the difficulties of vocabulary may be helpful for enhancing acquisition. As Carter (1998) indicates, '[l]earning vocabulary effectively is closely bound up with a teacher's understanding of, and a learner's perception of, the *difficulties* of words' (p.195). In the present case, the learners' perceptions of such difficulties have been contrasted with those of native speakers.

Discussions of the main findings and interpretation derived from the phase II have brought back an important issue of how to learn (or teach) vocabulary (Phase I), especially when there are presumably difficult words due to cultural differences. The following section further explores how the CE and BM groups of subjects

[30] A question arose about the role of BM responses to 'never' on the Likert scale. To investigate this interesting point, the mean scores for the BM and CE were re-caculated omitting 'never'. This re-calculation revealed no differences for the CE's mean scores, and slightly raising the BM's. The re-calculated BM mean scores were: ren (2.40), li (2.87), xiao (2.90), de (2.72), he (3.18), and junzi (3.13). However, this did not affect the outcome of a t-test. There were no significant differences between the re-calculated sets of the mean scores beyond those already shown in Table 9.6.

perceive efficient ways of approaching these six cultural keywords, which were perceived more difficult to learn from the BM's points of view.

9.4 Analysis of the beliefs of the efficient ways of learning the six cultural keywords

Table 9.6 shows the t-test results of respondents' beliefs about effective ways of learning the six cultural keywords recorded as beliefs of the participating students in relation to the 17 methods listed. A high mean score signifies agreement that participants believe a method is appropriate to learn these particular words. These 17 methods were chosen from the most frequent and effective individual methods (F-E models) evaluated by students in Phase I. In general these results confirm that the 17 methods used for general vocabulary learning strategies are also applicable for learning these six cultural keywords.

Table 9.6: Comparisons between BM and CE's estimations of the effective ways of learning the six cultural keywords

	BM				CE	
	Mean	SD	t-value	P	Mean	SD
1. using textbooks	4.03	1.10	3.28	0.001	3.25	1.22
2. teachers' help	4.52	0.57	-	-	4.12	0.95
3. visualising these words in mind	3.50	1.22	-	-	3.61	1.18
4. translating into learners' L1	3.27	1.04	-	-	3.30	1.27
5. using a bilingual dictionary to check meanings	3.45	0.94	-	-	3.42	1.20
6. other learners' help	3.82	0.77	-	-	4.06	1.10
7. real contexts	4.38	0.75	-	-	4.14	1.16
8. example of use	4.59	0.67	-	-	4.61	0.92
9. writing essays/compositions	3.56	0.95	-	-	3.48	1.30
10. resources, like TV/radio programmes/films/cassettes	3.41	1.04	-3.27	0.002	4.09	1.18
11. using vocabulary cards	2.91	1.12	-	-	2.88	1.20
12. writing or reading repeatedly	3.59	1.01	3.15	0.002	2.80	1.34
13. using a bilingual dictionary to check pronunciation or grammatical information	2.69	0.97	-	-	3.19	1.48
14. learning from native speakers	4.03	0.80	-	-	4.11	1.10
15. memorising in vocabulary books	2.94	0.89	-	-	2.84	1.30
16. associating with other words	4.03	0.84	-	-	4.12	1.15
17. taking notes	3.42	0.76	-	-	3.46	1.14

1-5: strongly disagree-disagree-neutral-agree-strongly agree; BM=British learners of Mandarin; CE =Chinese native speakers; P= Probability;
* $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$; -: not significant

But there are a few items which show lower mean scores. For BM, item 11 'using vocabulary cards', item 13 'a bilingual dictionary to check pronunciation or grammatical information', and item 15 'memorising in vocabulary books' were not considered helpful. And for CE, item 11, item 12 'writing or reading repeatedly' and item 15 have low mean scores. The similarity of the evaluation on item 11 and 15 between and CE and BM may imply that the two learning strategies are thought not to help to learn the concepts of the six words. Although there is significant difference concerning item 12 between them, it may mean that for BM, there is still the need to learn how to write and read the forms of the six words, so that this method can still be useful for associating the meaning, although learning the form, in itself, is not the same as learning the meaning.

Overall, the differences between the two groups show that first, in certain ways, BM have similar perceptions of vocabulary learning to CE due to (to some extent) their understanding of the six Chinese cultural keywords. Nevertheless, the three differences between BM and CE in item 1, 10 and 12 are obviously due to differences of learning levels which then restricted BM's use of materials and resulted in a lower level of mechanical learning. Second, this study has revealed that vocabulary learning methods may not be much affected by the type of vocabulary, at least with regard to these keywords. This can nicely validate the result of Phase I in which no specific words were given. However, it should be noted that the interpretation of a culture of learning needs to be cautious. The results of Phase II seem to imply that there are certain methods, in particular, the ones considered useful, which may be widely applied for general vocabulary learning purposes despite the nature of the vocabulary and learners' cultural backgrounds. In the meantime, both contextual and decontextual approaches may be used when learning this vocabulary.

In order to support the concluding findings obtained from the t-test, an Oblique rotation factor analysis was employed to explore the further simple structure of the 17 methods, and how the 17 methods may be clustered together.

It is interesting to find that CE only have two factors, and the first factor has over 50% variance (Table 9.7). Taking only the first two factors into account, there is a high correlation between factor 1 and factor 2. BM, however, derives six factors and there is no intercorrelation between the factors. In order to compare groups, only the first two factors of BM's responses were presented.

Table 9.7: CE and BM's factors of the estimations of the effective ways of learning the six cultural keywords

	CE		BM	
	F1	F2	F1	F2
1. using textbooks	.58	-.81		
2. teachers' help	.75	-.64		
3. visualising these words in mind	.68	-.56	.40	.77
4. translating into English	.72	-.75	.73	
5. using a bilingual dictionary to check meanings	.68	-.81	.87	
6. other learners' help	.76	-.58	.46	
7. real contexts	.81	-.49		
8. example of use	.88	-.50		
9. writing essays/compositions	.60	-.69		.84
10. resources, like TV/radio programmes/films/cassettes	.78	-.47		
11. using vocabulary cards	.67	-.86	.63	
12. writing or reading repeatedly	.54	-.90		
13. using a bilingual dictionary to check pronunciation or grammatical information	.47	-.83	.86	
14. learning from Chinese (native) speakers	.77	-.59		.61
15. memorising in vocabulary books	.57	-.90	.56	.30
16. associating with other words	.82	-.63		.63
17. taking notes	.72	-.80		.47
Eigenvalue Percentage of data-set variance Reliability (all items) Alpha=	10.06 59.2% .95 (N=148)	1.40 8.2%	3.93 23.2% .78 (N=29)	2.56 15.1%
Correlations >0.3 with any factors	F1 & F2 (-.65)		-	

F: Factor; BM=British learners of Mandarin; CE=Chinese native speakers

In Table 9.7, it is clear that for the CE group, every loading is highly correlated to Factor 1. Whereas BM's first factor is not as strong as the other group's. Moreover, not every loading correlates with Factor 1. The results of BM perhaps reflect the reality that

first, the low loadings are not very helpful for grasping the meanings of the six words. Second, such a defect cannot apparently show that they do not use these low loadings to learn vocabulary, so that the eigenvalue is not as strong as that one of the other two groups. Further evidence can be supported by the reliability score. When the scores are fairly high for CE (i.e. 0.95), there is only 0.78 for BM. Despite the individual differences of some learning methods, when using the Chinese scale to explore the differences among all 17 learning methods, it has been found that there is no statistically significant difference between the two groups (Table 9.8).

Table 9.8: T-test for learning methods of the two groups of learners

	BM (N = 27)	CE (N = 148)
Mean	61.67	61.55
SD	7.14	15.43
P	not significant ($p = 0.970$)	

BM=British learners of Mandarin; CE=Chinese native speakers
P = Probability; Sig.: * $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$

9.5 Qualitative Data of the open questions in the questionnaire

This section presents qualitative data on the keywords, i.e. an analysis of the open-ended items of the questionnaires. It is divided into two parts. The first part is about the subjects' own definitions of the six target words elicited in open-ended items. The results are presented largely in the subjects' original words. If there are similar expressions, then only one expression is chosen to avoid repetition.

The second part of the qualitative data is about the ways that the respondents suggest learning the six words. Data will be grouped by a given new heading. This presentation style can reveal the similarities and differences between the two groups.

9.5.1 Subjects' own definitions

9.5.1.1 Chinese learners of English

The most frequent CE definition for *ren* is "*kindness*". It appeared 35 times. Similar definitions are "*kind-heartedness*" and "*kind plus generous*". Defining *ren* as "*love*" is

also popular, usually qualified in such terms as "*great love*", a "*love for nature and society*", and "*love for thinking of others*". In some other aspects, *ren* can be "*thoughtfulness*", "*generosity*", "*open-minded*", "*sincerity*", "*benevolence*", "*charity*", "*sympathy*", "*mercifulness*", "*accepting others*", "*treated others as we would like to be treated*", "*gentleman-like behaviours*" and "*knighthood*". Therefore, *ren* can be "*a positive behaviour about human beings*", including "*human nature*", "*humanity*", and "*to be humane*". These comments clearly show, once again, that *ren* is a complex concept which subsumes a broad range of virtues.

For the word *li*, the most popular definition is "*politeness*" which occurs 21 times. The second one in frequency is "*courtesy*" (13 times) and "*good manners*" (10 times), along with "*well-behaved*". *Li* can also be defined as "*propriety*", "*proper ways*", "*etiquette*", "*acting properly according to the situations*", "*customs and regulations*" and "*being moderate*". Therefore, within such frames, *li* is "*an appropriate behaviour mode*", "*showing respect to others*", "*knowing how to deal with others in the most proper way*", "*understanding to respect others*", "*avoiding quarrels*", "*greeting when we meet our friends*". *Li* is to "*treat others as you want to treat yourself*" (see also the gloss for *ren*, above), so it is a "*mutual respect*". In a word, it can be "*a virtue*".

Over 20 times, *xiao* was defined as "*filial piety*". The key aspects are that this is said to be shown towards both parents, and elders in either families or societies. The concrete "*attitudes*" of *xiao* are revealed through "*respect and concern*", "*obedience*", "*responsibility*", "*being pleasure and honour to parents*", "*obeying parents' will*", "*kind-hearted*", "*courtesy*", "*taking care of parents*", "*respecting the elders*", "*showing gratitude for parents' love*", "*caring about parents*", "*being filial and polite to parents and elders*", showing "*obedience and thoughtfulness*". Other aspects of *xiao* mentioned clearly overlap with *ren*: "*kindness and respect*", "*kindness and sincerity*", "*love and sincerity*". In a word, *xiao* is "*to do everything that can make parents glad*", "*make parents feel proud of you*", and "*a good virtue*".

The Chinese native speakers defined *de* 15 times as "*virtue*" or "*morality*". Again, there is a clear overlap here with participants' use of these same terms to define *ren*, *li*, and *xiao*. *De* includes "*good deeds*", "*good manners*", "*thoughtfulness*", "*kindness*", "*ethics*", being "*moderate*", and showing "*generosity*". It can be the index of "*personality cultivation*", and "*a proper way to treat others*". It is then applied to a person who can "*show consideration for your employees*", and who is "*with profound wisdom and knowledge and is socially respected for helping lots of people*".

He is defined 17 times as "*peace*", and 15 times as "*harmony*". It shows that the ideas of *he* is a person who "*can avoid conflict*", "*be easy to get along with*", "*avoid quarrels with others*", shows "*generosity*", is "*gentle*", "*modest*", "*good-tempered*", "*mild*", and "*friendly*". It includes then "*good manners*", and "*understanding the philosophy of accommodation*". Some of these qualities (e.g. "*generosity*") clearly overlap with *ren* and *de*.

Many of the Chinese defined *junzi* as "*gentleman*". This definition came out 21 times. Further, it is "*a person who can respect others and the order of the society*", "*a person who knows very well how to deal with the real world*", "*a person who can accomplish all these virtues (i.e. the 12 definitions in the questionnaire)*", "*a person with good manners*", "*a person with noble character, morality, and humanity*", "*a person with courtesy, honest, humbleness, integrity, and quality*". *Junzi* is then obviously "*a righteous person*", "*with good conduct and consciousness*", who is "*kind, open-minded, and generous*", "*respected*". *Junzi* without doubt is "*a saint*", and "*a real perfect man*". Once more, there are clear overlaps here (e.g. with "*good manners*", "*courtesy*" and "*humanity*" or "*morality*") with *ren* and *li*.

These definitions written by the subjects support the higher means obtained in Table 9.1. However, there are also items like "*filial piety*" recorded in the open questions frequently but not in the top of the list as such but as "*virtue*" instead, in Table 9.1. This is perhaps because CE view *xiao* overall as the behaviour of "*virtue*", but then when

thinking of its translation, *"filial piety"* is the term learned in English. This also represents a conventional way of translating cultural keywords.

The following section presents the responses of the BM group. Although their responses are limited, results seem to reflect the more prototypical translations they encountered.

9.5.1.2 BM's own definitions

Partly because the number of the subjects of BM is fairly small, and partly because their knowledge about the six words may still be limited, not many of their own definitions were provided. Nevertheless, their responses are still interesting to see how they defined the six words; as seen below this is predominantly in terms of the conventional translation equivalents.

Three of them mentioned that *ren* is "*benevolence*". Two of them remarked that they "*don't really know*". And responses for "*courtesy*", "*humanity*", and "*to help weaker people*" appeared once. For the word *li*, three of them wrote "*rituals*", two of them wrote "*rites*", and another two defined it as "*ceremony*". "*Propriety*" and "*manners*" were each mentioned once. One of them declared "*don't know*". As for the word *xiao*, five of them noted "*filial piety*". One of them mentioned "*respect of elders*" and another one of them defined "*to look after weaker people*". One also put *xiao* as "*respect*", but added in brackets "*I'm not too sure*". One of them simply answered "*don't know*". For the word *de*, five of them defined it as "*virtue*". Two of them recognised it as "*morals*". The rest of the definitions like "*beliefs*", "*kind*", and "*virtuous potency*" appeared only once. Two of them failed to identify the word with any cultural meanings, and considered *de* as the word for "*Germany*". In the context, and given the Chinese character in the questionnaire, this is clearly a misunderstanding of taking a more basic homonym. The word *he* has several frequent British definitions. Four of them define it as "*peace*"; three wrote "*harmony*", and two noted "*tranquillity*". With such characteristics, the person who has this quality can be "*of settled heart*", and "*friendly*". However, three of the subjects only showed their understanding of the word without the

cultural aspects. They think *he* is the word for the common meanings of "*along with*", "*plus*", and "*togetherness*". The word *junzi* was termed "*gentleman*" three times. One subject further explained that *junzi* is "*a Chinese person-the perfect gentleman-ideal of Confucianism*". Another subject simply noted "*master*".

From the pattern of the responses, it is clear that BM, in general, have only some partial understanding, or even vague ideas of these words; some of them failed to recognise the fundamental (however difficult) meanings regarding the six words. Compared to the native speakers' pattern, the mental lexicon of the six words of BM is relatively small, judging from the responses. It is also apparent that there is far less overlapping across the BM definitions, compared to the Chinese group.

Nevertheless, however limited their cultural keyword knowledge, they may gradually develop their awareness of Chinese cultures, as there are some equivalents which are not frequent words used to define the target Chinese cultural keywords. This view may also be supported by their beliefs of the ways of learning these words. Generally, it is apparent from the responses of the BM group that there are not overlaps of meanings across the six keywords.

9.5.1.3 Overall remarks of the two groups' own definitions

The two groups' qualitative responses reveal the following findings concerning the six words and the 12 definitional elements. They are listed as follows.

(1) Some definitions written by the subjects are also typical translations used in the classics, literature or philosophy and are similar to the results obtained from top of the mean scores. This may not be a surprise since the definitional elements were derived from common translations, but this result confirms how respondents accept them.

(2) Some written definitions have some complications or features of oversimplifying the definitions. For example, some subjects of CE defined *ren* as *love*. But then there are also some other aspects of *ren* noted down.

9.5.2 Subjects' view on the six words and the ways of learning/teaching them

There are two general criteria of organising the data. Some simple and similar responses of CE will be given in the respondents' own words, but without full quotation. As for the BM group, their responses will not be condensed further due to their small number.

It seems important to present examples of the participants' actual words to illustrate these points. This will show how participants, in their explanations, go beyond the definitional elements used in the Phase II questionnaire. That is, these quotations show some breadth beyond common translations. Further, it seems useful to show the tone and emphasis of the participants' own voices, especially since there is little published research on learning Chinese.

The two groups' responses to the open question about learning the six words indicate general difficulties of learning them. The main way of learning them is to learn them through contexts. The results will be presented separately for the two groups.

9.5.2.1 CE's view

Many Chinese native speakers considered the difficulties of learning the 6 Chinese keywords for English speakers from the following aspects: (1) they are considered "*abstract words*"; (2) they have "*no exact meanings*"; (3) there are "*cultural differences*" of the six words; (4) they contain "*cultural connotations*". One of the respondents noticed that "*I think all of these words have profound meanings and each of them are related to or connected with one another.*" One particularly gave an example of how these words may cause confusion. She wrote: "*Western students of Chinese may feel confused with 'ren' and 'de', for these two words are easy to be mixed up for us (our native speakers).*" Some other similar comments are: "*I think it's really difficult for Western students to learn these abstract words, since we Chinese sometimes do not know the exact meaning of these words.*" "*It's hard for foreigners to understand the words, because the teacher may not understand these words precisely as well.*" Because

of these reasons, most of them believe that to teach or learn these words "*is a challenge job*" and "*very difficult*".

However, many of them proposed methods that may be useful for learning them in the final open question of the questionnaire. Suggestions include using: "*examples*", "*examples of behaviours*", "*stories*", "*Chinese classics and the cited quotations*", "*Chinese history*", "*Chinese fables*", and "*Chinese traditions*". One said that "*all these words are the main concepts of Confucianism, teaching them those ancient stories or events may be helpful.*" contextual clues may also be supplied through viewing modern films. One subject mentioned: "*Show students about Li-An's movies, and tell them what kind of behaviours are these.*"

These recommendations are based on their awareness of the importance of learning about Chinese cultures. There were many comments like: "*To learn these words, they (foreigners) must understand what Chinese culture is.*" "*The more you realise the culture of Chinese in details, the more you will understand them.*". Such comment reinforce a basic claim of Phase II, that these words are indeed cultural keywords. Only one negative opinion of learning these words was given, without further reasons: "*It should not be so necessary to teach them about these words.*"

All in all, from the above responses, it can be concluded that CE are aware of the difficulties of learning these six words, since the words derive from certain roots of Chinese culture. Some subjects mentioned that even as native speakers they could not describe the words very precisely, as the concepts may be abstract, wide, or that they overlapped with the same concepts of other words.

9.5.2.2 BM's view

Similar to the comments of CE, BM were aware of the difficulties of the six words. However, partly because of the small number of subjects of this group, and partly

because of the low response rate for the open questions, there are few responses. Therefore, all of their responses will be presented here without further reduction.

Four of the British subjects who were learning Mandarin commented on the difficulties of the six words. Again, these comments show the participants' awareness of the cultural nature of the keywords.

(1) "*Very difficult to understand the difference. All quite the same. Incorporates many similar things. All very personal meanings/definitions.*"

(2) "*They are difficult because there are rare equivalence between English and Chinese. They are thus Chinese unique concepts.*"

(3) "*Their translation into English are quite vague, so it's difficult to write down what you think may mean.*"

(4) "*They're hard to apply to English, because they are such Chinese expressions!*"

When asked about the ways of learning the six words, two mentioned their limited cultural knowledge. One said "*We just look at these words in contexts, not really talk about cultural aspects.'* The other mentioned *'The characters I know I've only learnt in the context of liwu (禮物 present), deguo (德國 Germany) and so forth, so I haven't learnt any deeper meanings.*"[31] Therefore, the last opinion showed that cultural meanings investigated in the study are the 'deeper meanings'. This may have implied the importance of learning cultural aspects of the six words.

However, seven of the respondents know some general cultural meanings of the six words: six found contextual meanings and examples important, and one emphasised a possibility of deriving the meanings from analysing the six words. Their comments are listed as follows:

[31] This particular respondent clearly had not understood *de* as 'virtue' and *li* as 'propriety', but this person was aware that they had deeper meanings, although this person did not know the precise nature of the deeper meanings. This indicates this person's inadequate understanding of these particular two items. However, this is the only misunderstanding in the data set and it hardly invalidates the questionnaire.

(1) "*Maybe learning the origin of these words; maybe a story they are used in; try to grasp their original concept.*"

(2) "*I guess it is quite necessary to use Chinese culture or history to explain these words.*"

(3) "*They are impossible to really understand without some knowledge of Chinese culture, especially in reference to differences between Taoism and Confucianism.*"

(4) "*It is important to try and have them explained in the context of classical Chinese and Chinese thinking, including the tones and connotations they carry, not simply by providing an English translation.*"

(5) "*It is necessary to learn these words' meanings by reading classical Chinese texts, or at least many works on those texts.*"

(6) "*See them in as many contexts as possible.*"

(7) "*Get to grip with characters. Ability to analyse characters would be useful. Make it fun!*"

From the above BM subjects' views on learning the Chinese six words, it is clear that they are considered difficult words from either the nature of the words--with classical meanings, or from the subjects' contact of the words. They were aware that to overcome the barrier of understanding another culture, there is a need to learn the origins of the words, including relevant classics and philosophies.

9.6 Evaluation of the questionnaire design

In oral feedback after subjects had completed the questionnaire, many mentioned that this is a questionnaire which is difficult to answer, and takes a long time to complete even if the layout of the questionnaire looks simple. They maintained that they had to think a lot before they made the evaluation of each item, because some items consisted of positive values of translation but were not suitable for interpreting the word. Though they did not indicate reasons in more detail, this highlighted the problem of the translation. One of the main ideas behind the design of the study is to investigate this

translation gap or overlap. There is a low frequency of 'no response' among CE. This may show that the subjects are all Chinese native speakers, and they basically have their own concepts to make judgements. As mentioned before, the 12 items were selected from translations in the literature, cross-cultural communication studies, and dictionaries. Two main criteria for picking up these translations are: (1) they are frequent definitions; (2) there are overlapping meanings between at least two words. The difficulty that subjects faced may also indicate the unclear nature of the concepts, and the untranslatability between English and Chinese. This implies that the concepts of Confucian terms words may need a wide range of English words to make them more translatable. Furthermore, maybe there is interference due to the reinforcement of the judgement of the 12 definitions.

Some other aspects of limitations regarding the research design may be summarised as follows. First of all, data are not strictly equivalent. Ideally, it could be better to have a two-way comparison by giving Chinese native speakers and BM the English version of the questionnaires to have a two-way comparison. But this would have raised a further difficulty not only because of concerns of expense and time, and students' willingness to fill in a short questionnaire (and likely reluctance or refusal to fill in a long one), but because one of the basic intentions to include the English native groups was to demonstrate that the nature of the six Chinese words can be culturally-centred. Therefore, the typical translations may fall into the trap that they are difficult to be understood by another group from a remote culture or language, as the translations have their different connotations or denotations in the two languages. This is a standard problem in translation activity. Second, technically, other possible difficulties that bother students may be because of the design of the 7 point scale, which may delay Chinese students to make quick judgements if they are not so familiar with answering questionnaires. Finally, there are in fact very few words involved in this study. Further research is highly desirable to solve the dilemma between timesaving, by using a brief

questionnaire to facilitate responses, and in-depth investigations, in order to get detailed responses.

9.7 Conclusions

This chapter has analysed six Chinese cultural keywords in English. It uses data-based methods to demonstrate differences of word knowledge between Chinese native speakers, and British groups who were learning Chinese.

Based on the mean scores (Table 9.1-9.2), charts were made to show the logical relations of the inclusions and overlaps. This is the model to represent the native speakers' judgements based on the measurements derived from the questionnaire analysis. It clearly shows a very integrated picture. Most of the definitional elements of cultural keywords are the basis of *junzi*. For instance, *ren* and *xiao* are related but not the same. Potentially such charts seem very helpful for translation, and for direct demonstration to learners.

The findings may not apply to the general population, as, first, only a limited number of British learners of Mandarin were involved in this study. Second, there are some cross-cultural design weaknesses which need further improvement. However, this is perhaps not a fatal problem for this research, as the two groups themselves have been "culturally representative" even if the groups are not "statistically representative" (Szalay *et al* 1994: 11).

The factor analysis (section 9.2.2.1) demonstrated that there are complex overlappings across the six cultural keywords according to the CE's responses, since it was possible to use the mean scores to make the figures (Figure 9.1 – 9.4), which show semantic connections, inclusion and overlaps. The factor analysis results were not taken further to make such visual representations of the relations of the six words. The fact that the main factor was difficult to name also affected the decision not to use factor analysis results this way.

All in all, this exploration of the Phase II yields the following findings.

(1) The six Chinese cultural keywords are semantically connected and there are overlaps of the definitional elements of the six words, which itself suggests strongly that the meanings of the keywords overlap.

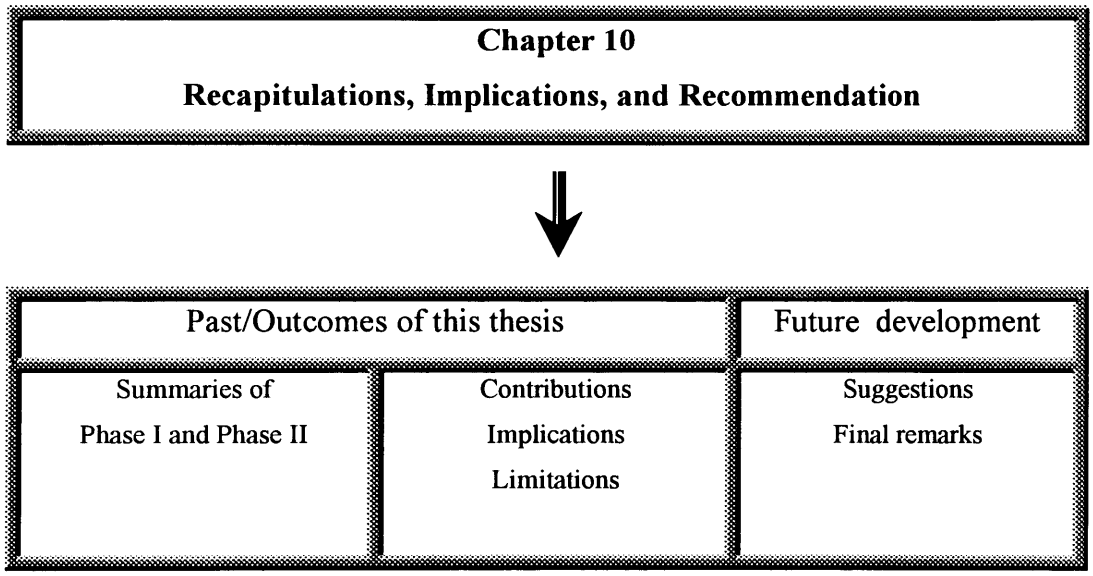
(2) These six Chinese cultural keywords can be difficult for foreign language learners to learn. One clear reason for this is that the individual word meanings are not only complex but that they overlap across the lexical set.

(3) Some, if not all, English translations or interpretations may cause problems to understand these Chinese cultural keywords either because they are also difficult and uncommon words or because they have different connotations. The common feature of some translations, that the Chinese terms are associated with one-to-one matches with certain terms in English, seems highly misleading in the light of the present findings.

(4) There are statistically significant differences as to how the CE perceive the difficulty of the six Chinese cultural keywords compared to the BM. But the two groups showed little difference concerning their views on the effective ways of teaching and learning these six words.

Part III Conclusion

Part 3 of the thesis starts by recapitulating the findings of this research study. This is followed with discussions on the general contributions, implications, and limitations of the study. It finally proposes suggestions for future research and ends with final personal remarks.



Chapter 10

Recapitulations, Implications and Recommendations

10.0 Introduction

This study has explored the foreign vocabulary learning strategies of Chinese and British university students with some emphasis on cultural aspects of learning vocabulary. There are two main cultural aspects. First, this study has presented evidence that there are some significantly different emphases of use of learning strategies (shown in Chapters 4 – 7). Second, there are different emphases in understanding cross-cultural keywords (see Chapters 8 – 9). Through the analysis of questionnaire and interview data, learners' vocabulary learning strategy profiles were established (Phase I) for CE, BM and BF. These profiles reveal that there are differences between these groups. It is argued that different cultures of learning L2 vocabulary may account for many of these differences. Such culture of learning will necessarily be influenced by culture in general and by educational traditions and changes. The exploration of the six cultural keywords and how CE and BM understand them and vocabulary learning strategies they suggest for these words (Phase II) is important because it constitutes a detailed exploration of keywords and how they might be learned. This kind of focussed application to actual examples of lexical items is surprisingly rare in the research literature regarding language learning strategies, and vocabulary studies. These particular words were selected as being culturally central for CE and hence, clearly challenging for learners of Mandarin. Phase II, thus, provides a clear exemplification of vocabulary learning strategies investigated in Phase I, and in fact, an important finding is that the main strategies used by respondents in a general way in Phase I are also the main strategies used by the respondents in Phase II for these particular challenging keywords.

A thesis about aspects of exploring learners' learning activities, as McDonough (1995) would argue, does not intend to reinforce an innovation or revolution of foreign

language vocabulary pedagogy, since results arising are best regarded as "explanatory and consultative" but "not decisive" (ibid.: 121). Nevertheless, information deriving from this admittedly exploratory thesis may serve as a starting-point to develop a general understanding of how learners from different cultural academic backgrounds perceive themselves to learn foreign language vocabulary.

This chapter, first, overviews and summarises the outcomes of the study. It then highlights the general research contributions, and raises implications from the findings and discusses limitations. Finally, it draws suggestions for future research studies.

10.1 Review of the research ground and purposes

This research study started from recognition of the importance of learning lexis in foreign language learning (Chapter 2), current vocabulary teaching and learning strategies (Chapter 3), and the importance of considering foreign language learners' cultures in the sense of both culture of learning (Chapter 4) and learning of culture (Chapter 8). The aim of this exploratory research study was to identify to what extent the use of vocabulary learning strategies is different due to the cultural background of learners, and L2 target language differences, which might affect their learning strategies.

This study consists of two phases. The first phase used questionnaire and interview methods to focus on how Chinese learners of English (CE) generally learn the target foreign vocabulary, compared to British learners of Mandarin (BM), and British learners of French (BF). In the research design, it was hoped to reveal clearly how the two variables of learners' culture, or academic culture, and the target language have their roles in influencing students' use of learning strategies and their beliefs of strategic usefulness. Further, Phase II explored whether learning specific cultural keywords may reveal differences in students' beliefs of the more frequent and efficient methods.

In the second phase, 6 Chinese cultural keywords were selected to investigate further the validity of the results obtained from Phase I, using a further questionnaire and some interviews. Due to the complexities of the English translations of the 6 Chinese cultural keywords and different connotations between Chinese and English translations, they were difficult words to learn.

10.2 Summary of findings

Phase I, through quantitative analysis (Chapter 6) and qualitative analysis (Chapter 7), has shown distinctive vocabulary learning patterns between Chinese and British students, but there was also a general common pattern. Further, from the analysis of Phase II, considerable differences of emphasis in understanding the concepts of the cultural keywords were found. But there was little difference in applying the most common methods to learn these words.

This section summarises the research findings from the quantitative and qualitative data. It indicates the sections of previous chapters for ease of reference.

10.2.1 Summary of findings of Phase I Quantitative Analysis

Phase I analysed the data of the general learning strategies by exploring (1) the mean differences between the three groups of perceived frequency and efficiency of strategy use, (2) descriptive statistics for displaying the ranking of the mean scores and standard deviations, (3) a factor analysis of the underlying factors, and (4) a reliability test and further mean comparison of the underlying factors (see Chapter 6). From these methods of analysis, four main findings are listed as follows.

(1) Different evaluations of vocabulary learning strategies

Many items concerning beliefs of using vocabulary learning strategies showed significant differences between the three groups. These differences may be due to a

combination of a variety of factors, cultural background, broad educational influence, teaching and learning methodologies, the influence of materials, the nature of the target languages. On the present evidence, it is not possible to disentangle these to isolate particular factors or strength of influence. However, two aspects have been considered here, culture and target language. The first broadly covers social expectations of learning from educational, social and other institutions (see Chapter 4) and is glossed here as 'cultural'.

Cultural differences were grouped into five orientations: the use of the media, social, form/pattern, memorisation, and self-learning. Further, after classifying the relationships between perceived frequency and efficiency of each method, it was clear that CE showed a different pattern of responses from that of BF and BM. For CE, there was less extreme contrast between the methods (see Figures 6.1 - 6.3). That is, the distance between the most and least efficient/frequent methods was shorter than that of the BM and BF groups (see 10.4.2 for the explanation).

(2) Different combinations of the vocabulary learning strategies

The factor analysis and reliability test showed the underlying components of the efficient ways of learning vocabulary in differences between CE and the other two groups. There was a fuzzier pattern of the compound methods of the CE compared to those of BF and BM. The result was interpreted in two ways. First, it might be because CE lack awareness of distinguishing the more appropriate strategies to learn different words compared to the other two groups. This interpretation may imply a special need of training for CE to be more selective for the appropriate strategies to learn different kinds of lexis. Second, it might be because CE integrate many ways of learning vocabulary in their learning practices. In fact, the latter may be the case, since a preliminary analysis shows that the gender variable seems insignificant to distinguish Chinese beliefs of the 58 questionnaire items. Overall findings may be evidence against the stereotype that Chinese learners only focus on rote learning or on a narrow-focussed

range of using vocabulary learning strategies. But on the other hand, it is not clear whether CE use their range of strategies appropriately.

In contrast, British students have shown a looser system of vocabulary learning strategies, because there was no distinctive factor pattern. This may be partly because of the 'liberal' and 'individualist' traditions in British education systems which may lead to flexibility of beliefs of vocabulary learning strategies. Or it may simply be that regarding learning a foreign language, British students may have comparatively less awareness towards vocabulary learning strategies.

Overall, there are both strengths and weaknesses of the above two-way explanations of the results with regard to the learners' training. One the one hand, an apparent British flexible style may mean that these students are more adventurous to try different vocabulary learning strategies. On the other hand, the more uniform and consistent thread of vocabulary learning strategies that Chinese students use may mean that most lexical items are treated in the same way, which may leave some lexis unnecessarily overlearned or underlearned.

(3) General principles of vocabulary learning strategies

Although there were differences of evaluation towards each individual strategy, this did not necessarily mean that no general frequent and efficient methods were identified across the three groups. On the other hand, some methods were considered neither useful nor efficient in all groups. Furthermore, the result of the factor analysis suggested that there was no difference in the perceived frequency of underlying patterns (see Table 6.9). Therefore, there were no differences of the underlying mixture of vocabulary learning strategies in terms of the variables of both target language and learners' level.

10.2.2 Summary of findings of the Phase I Qualitative Analysis

The analysis of the qualitative data used a conventional way to examine the common patterns of the comments in the context of the discourse. Although there are some computer-assisted programmes for analysing qualitative data, they were not considered necessary for this study. First, the data were not too voluminous to handle. Second, there are still limitations in the use of such programmes, because the researcher's own implicit analysis through tagging and organisation are still the priority.

(1) Different focus of the spontaneous responses

Due to the limitation of the time for conducting interviews, interviewees' responses could be partial, too. However, within the restricted amount of time, some general patterns were found. The patterns showed that there were differences of focus on the vocabulary learning strategies among the three groups. CE generally focused on using the media for listening. BM, however, tended to seek some help from memorisation and practice. And BF, although they were not interviewed, in their answers to the open-ended questions in the questionnaires showed that practising was highlighted.

(2) The similar combined nature of using vocabulary learning strategies

Despite the different focuses, it is the general pattern that learning vocabulary requires a combination of methods. Therefore, emphasis on any single method analysed from the questionnaire data should only be used as a reference point for understanding the tendency of learners' preferences. It did not necessarily mean that students only use this or that method in their learning process. However, there was also a possibility that there are wide variations of each student's range of combinations employed.

Both quantitative and qualitative data regarding BM show that they have in some ways adopted Chinese methods of learning. This is seen through the contrast with BF and comparison with CE. This finding is important culturally and pedagogically. Culturally,

it shows the important movement by this group towards the target culture because BM seem to be learning some aspects of Chinese in Chinese ways. This cultural edition may have pedagogic implications particularly for learning Chinese literacy that some aspects of language learning may need to engage in using target language methods in the context of CLT compared with more traditional approaches often found in China. This finding is very important for teaching Chinese as a foreign language and conversely for teaching English to Chinese learners.

10.2.3 Summary of the findings of Phase II Quantitative Analysis

The Phase II study consisted of building up the definitional elements of 6 cultural keywords, the cross-cultural conceptual differences of understanding these keywords, and the perceived efficient ways of learning them. The Phase II data were analysed in order to support the results from the general survey of Phase I. Data analysis (see Chapter 9), as in Phase I involved (1) the comparison of the mean scores, (2) correlation coefficients, (3) the exploration of the underlying patterns of responses through a factor analysis, and (4) a reliability test. Three main findings were as follows.

(1) The cultural differences of understanding six unique cultural keywords

From the result of the mean scores and the correlation-coefficient, there were obviously different conceptual meanings of the 6 words between Chinese native speakers and the British who were learning Mandarin. The inclusion and exclusion diagrams (see Figures 9.3 – 9.4) revealed which definitions were included and excluded by subjects' responses. The two groups of subjects apparently have different perceptions of how the words relate to each other as seen in their responses to the definitional elements.

(2) The fuzzy and difficult nature of the meanings of the cultural keywords

The factor analysis showed that there was a fuzzy edge of prototypical meanings of the 6 cultural keywords among the Chinese native speakers. As for BM, it was shown that they did not have the same factors as the CE group.

(3) Similar vocabulary learning principles of learning the cultural keywords

As the 6 Chinese culture keywords showed conceptual and semantic complications and overlaps when translated into English, it is reasonable to assume that they are difficult words to learn for L2 learners. Therefore, time may be needed for expanding learners' knowledge of these words. It was however, interesting to find out that the most frequent and efficient vocabulary learning strategies analysed from Phase I were also applicable for learning these 6 theoretically difficult words. This may imply that when learning vocabulary, the nature of particular target words seems not to influence the strategies that students employ; what learners believe are useful methods would be applied for learning vocabulary in general. Therefore, it is possible to draw up a generally applicable model deriving from the questionnaire investigation for learning and teaching vocabulary (see Figure 10.1 for such a model).

10.2.4 Summary of the findings of the Phase II Qualitative Analysis

The qualitative data of Phase II were based on the interview and the open-ended questions. Two main findings are listed.

(1) An absence of a systematic and obvious pattern of understanding the cultural keywords

During the interview process, it was found that students (BM and CE) found it difficult to give examples of cultural keywords. This may imply that on the one hand, conventional vocabulary pedagogy fails to provide a systematic and conscious syllabus for teaching and learning cultural keywords. On the other hand, students or teachers

may have been short of cross-cultural awareness of examining the vocabulary *per se*; perhaps they did not normally consider vocabulary in cultural terms.

(2) A lack of variety of vocabulary learning strategies to learn cultural keywords
As the result showed from the quantitative data of Phase II, there were not many alternative learning strategies mentioned in the open-ended question. Although there was a possibility that responses to open-ended questions may be sometimes limited, it seemed also reliable that the 17 methods listed in Phase II were judged the most popular and appropriate methods.

In both quantitative and qualitative analysis of Phase II , as with Phase I, it emerged that BM had acculturated towards Chinese ways of learning, for example, in learning the cultural keywords through repeatedly writing and oral repetitions. This again suggests for some aspects of vocabulary learning, students may need this cultural edition to be successful. This study has, in this respect, found clear evidence, at least with the BM group, that some students do indeed move towards some form of cultural synergy (Cortazzi and Jin 1996c; Jin 1992; Jin and Cortazzi 1993, 1998b). This demonstration is important because Cortazzi and Jin (ibid.) have advocated cultural synergy on the basis of their research showing the need for the application of such a concept, but not actually demonstrating such synergy in action.

10.2.5 Overall summaries of findings

Phase I provided extensive information of how learners' say they learn vocabulary. The results showed differences of beliefs on single and underlying combinations of 58 vocabulary learning strategies between different ethnic and academic cultural groups. However, in Phase II, the result has shown that the same most frequent and efficient methods valued by the CE and BM groups were in fact applicable for learning specific and difficult cultural keywords. Further, there were few differences between the two

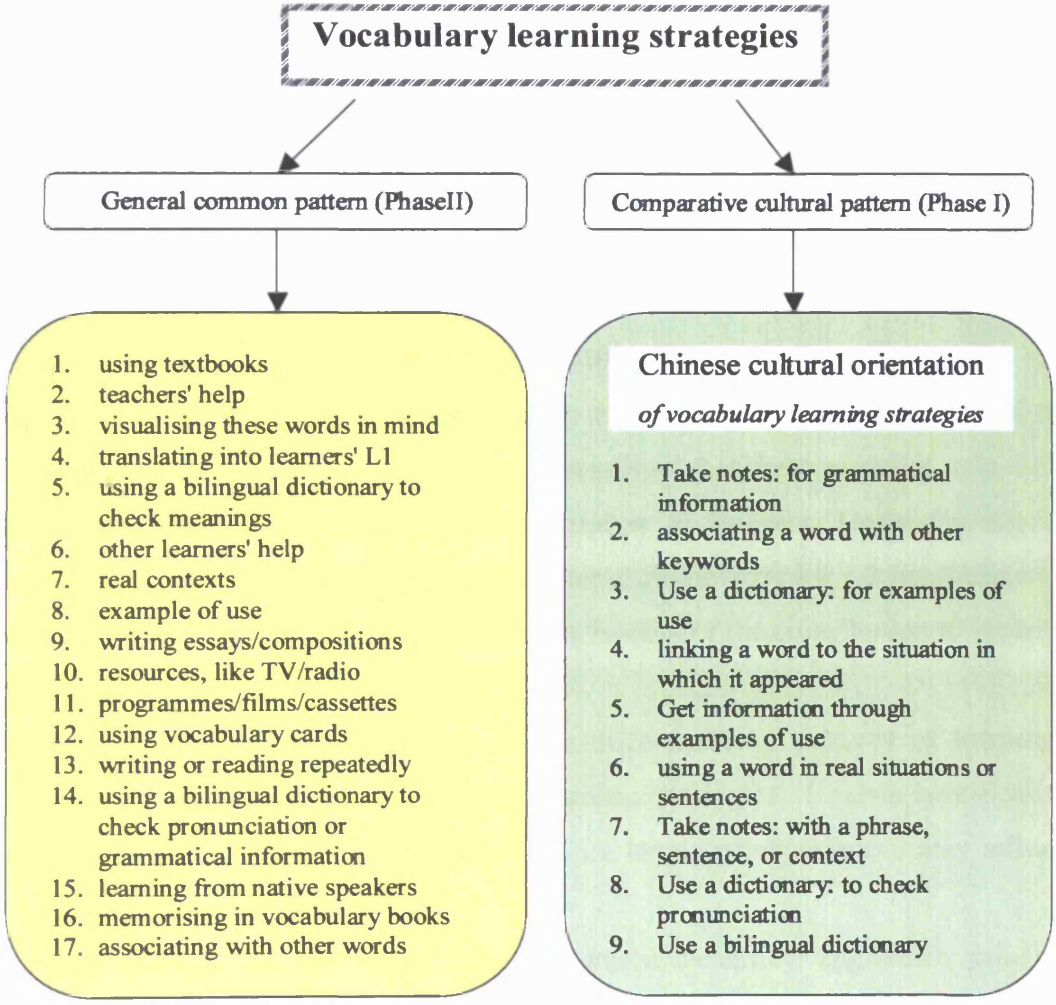
different groups in proposed use of learning strategies, although there were marked differences in understanding the words themselves.

The findings of both Phase I and Phase II showed that despite some differences in emphasising the use and efficiency of vocabulary learning strategies, there was no obvious difference about the use of familiar methods for approaching the cultural keywords. By implication, there is a general principle that may be generated for learning vocabulary in general, although this should not neglect the influence of the culture of learning and the difference of target language. This difference in target language emerged most clearly on learning written aspects of Chinese characters, where the nature of the target script clearly made a difference compared to the Roman alphabet of French or English for the BF or CE groups.

Figure 10.1 illustrates these main findings in terms of strategies by listing the strategies common to different groups of language learners (i.e. BF, BM and CE), compared with those strategies which are emphasised particularly by CE. This latter group is, in a sense, the baseline group for both phases of this study.

Figure 10.1 clearly shows that there is a considerable range of strategies within the general common pattern which applies to all three groups despite different target languages and levels of target language learning. It also shows that a Chinese cultural orientation is specific to CE but not exclusively, i.e. BM and BF may use some of these strategies to a limited extent but not to a significant degree. However, with CE, these are major and significant ways of learning vocabulary. By implication, the BM and BF groups are not using these in any significant ways. Figure 10.1 thus gives information by default about the two British groups. Because of the limitation of the size of the BM, and lack of BF in Phase II, it is difficult to justify conclusions without further research studies.

Figure 10.1: Framework of learning foreign language vocabulary: comparing common strategies with those specifically used by Chinese learners



It is interesting that Chinese cultural orientation includes two types of taking notes of various information. There is no such reference to note taking in the general common pattern. A possible explanation for this is that CE use their notes for memorising, while

it might be thought that their note-taking is part of independence to self-study which may not be rote at all. Jin and Cortazzi (1998a) have shown in some respects that Chinese subjects are more autonomous and independent on their study.

Overall, the findings suggest that it is not justified to say 'X group of learners don't do this, and do that. Or Y group of learners do this and don't do that.' It can be more justified to say that 'X and Y both do or don't do this and that, but the strength of emphases of doing this and that may sometimes be different from each other'. Therefore, on the one hand, there is a culture of vocabulary learning strategies as the majority of researchers proclaim (Cortazzi and Jin 1996a; Schmitt 1997). On the other hand, there is a general pattern of strategies as also argued (Willing 1988, 1989).

10.3 General contributions of this study

The main purpose of this research was to explore cross-cultural beliefs of common vocabulary learning strategies. This study identified that there were not only differences but also similarities across these three groups of learners. Understanding learners' beliefs is clearly important to provide a general framework for L2 vocabulary teaching pedagogy and research. There are four main aspects of the contribution to research from this study.

(1) This study provides awareness of the differences of cultures of learning in L2 learners' emphasis on vocabulary learning strategies. It also specifically raises awareness that the target language and L1 language experiences may influence the learners' learning beliefs.

(2) The findings of this study have generated generally applicable principles for learning L2 vocabulary despite the predominant variables in the form of a model (Figure 10.1). Such a model may be useful for vocabulary pedagogy (see 10.4 for a further discussion).

(3) The investigation of cross-cultural interpretations of the six selected cultural keywords provides the insight that vocabulary can be the means of learning culture,

as the basic understanding of these words and the relations between them can be quite different.

(4) The study asked L2 students to evaluate vocabulary learning strategies; the results may offer teachers information about L2 learners' learning expectations and behaviours.

10.4 Implications of the findings

The findings of this study have some important implications for vocabulary pedagogy, and for learner strategy research and cultural implementation. Three main aspects are identified.

10.4.1 Vocabulary pedagogy

It has been shown that many of the frequent and efficient vocabulary learning strategies that learners perceived were self-enhanced methods. There was little difference in applying them for learning difficult cultural keywords. This may imply that, on the one hand, students may not have the awareness of verifying vocabulary learning methods to select the most appropriate methods for particular types of words or contexts. They may only stick to using the ways they are more familiar with. To do this, they would only need some kind of general awareness of the nature of the particular target words, rather than knowing their exact meanings. Thus, if students are aware that a particular target word is a cultural keyword, they might well approach learning that word in a flexible manner using strategies which could be quite different from those used to learn a word with a concrete referent with no particular cultural connotations. On the other hand, teachers may not have systematic awareness either to enlarge their students' use of vocabulary learning strategies for more flexible and productive lexical learning.

Nevertheless, teachers, students, materials, and curriculum designers need to have the awareness of the importance of strategies for teaching and learning vocabulary. This is the basis for developing learners' *skill acquisition* as part of L2 acquisition (O'Malley

and Chamot 1990). There is an emphasis that vocabulary pedagogy should not only focus on the learning of word knowledge but also on systematically and explicitly applying the methods to get access to such knowledge. Although as Naiman *et al.* (1996) argue about an inappropriacy of "long lectures on strategies and techniques", they do proclaim that:

> "...hints from the teachers or periodical brief exchanges with students about different ways of learning would change classroom language learning from a fairly mechanical routine into a more deliberate co-operative undertaking. Different approaches to learning could be planned and tried out in a more conscious way than has been customary" (p. 225).

10.4.2 Cross-cultural awareness of research methodology

From the analysis of the research in Phase I, it is clear that the responses of the three subject groups showed an obviously different pattern. Chinese groups seemed to be more conservative when they evaluated the items of the questionnaire, whereas the British group showed a more liberal and spread out pattern. This may imply not only that there can be cultural differences in lexical learning, but also that there can be cultural differences in responding to research questionnaires. By extension, different interactive and discourse patterns were also found in interviewing.

Such differences result from not only 'linguistic' but also 'socio-cultural' variables in an ethnographical research like this thesis. Cortazzi and Jin (2000) are aware of how evaluations of research involving narratives can be different from one culture to another. Therefore, researchers who conduct cross-cultural research studies need to equip themselves with cross-cultural awareness in order to interact more appropriately with students coming from different cultural backgrounds, and to reach more appropriate insights for evaluations and conclusions derived from different cultural contexts.

10.4.3 Collaboration between language teachers, learners, and researchers

It was not very easy to get access to universities to conduct this study. But this did not mean that students involved lacked interest to complete questionnaires or be interviewed. On the contrary, the students and teachers that the researcher encountered tried their best to help with both aspects. Moreover, students, in particular, felt quite excited about the fact that their opinions would be taken into account in the research analysis. However, the reality was that such a research project was not included in the formal syllabus, curriculum or assessment, and the researcher was not offered any extra time. It is perhaps only when the teachers and the students are more aware of how L2 language research may bring them long-term benefit, that data collection may be facilitated. In the meantime, it is important to train teachers and learners as researchers themselves.

10.5 Limitations of the study

This study has presented interesting results about common vocabulary learning strategies and some such strategies which are particularly emphasised by Chinese or British learners. Since the study is exploratory, there are inevitably some limitations. There are three kinds of limitations. One is the overall methodological design of the study and the others were caused by the process of data collection. The former aspect generates several fundamental limitations for Phase I and Phase II.

(1) There may be a concern in both Phase I and II, since the questionnaires investigate the learning methods as if they are discrete, whereas learners are likely to combine methods. But there are three counter points. First, it may be difficult for students to be aware of how they cluster methods in systematic ways. Second, the interview data demonstrate how interviewees combine vocabulary learning methods. Third, the factor analysis sought to show underlying factors – this was more successful in Phase I than in Phase II.

(2) This study did not test cultural keywords together with other types of words in Phase II; this would be done in a future study.

(3) This research study did not carry out any analysis within the same group of the subjects. Although the research was designed to explore group tendencies, there remains a question how some variables like gender (briefly mentioned in this study), language proficiency, age, years of language learning experience or correlations of these factors may influence the results obtained from this study.

Regarding the data collection, under the limitation of time, and co-operation from universities, there is still much scope for research after conducting this study. However, there are several aspects which are interesting to ponder, which indicate other limitations.

(1) There is a question of the validity of comparing the results since Phase I and Phase II involved different subjects. This was not completely the case here, but limits of access in some institution meant some other subjects were different. However, at the level of the groups, it seems doubtful that this limitation has affected the results.

(2) Results of Phase II may not be too convincing when the numbers of the BM group were statistically small compared to CE. In addition, in both Phase I and II, CE's factor loadings were used as a basis to compare the BM's (and/or BF's) vocabulary learning strategies, but it would be ideal to use both BM and BF as criteria to compare the differences in the future. However, this would be more meaningful when the sampling size of these two groups is enlarged, in particular in Phase II.

(3) Results obtained from this study were mainly obtained from elementary statistics drawing upon the researcher's knowledge of statistics when the results were analysed. Other more advanced statistical processes could be usefully applied to give further detailed supportive information when comparing three different groups of learners.

Overall, the results obtained from the students' self-report data may not be an exact representation of the methods learners actually use. However, this kind of investigation must surely provide a sound guide to students' beliefs and practices about their

vocabulary learning strategies. Even at the level of their beliefs, which the researcher included in this study, it is important to know what these beliefs are (McDonough 1995). This study does not claim to represent a reality of what methods learners actually use, since there is a constraint of eliciting a thorough picture of their vocabulary learning strategies (Cohen 1987a). Nor does this study proclaim that the results obtained from the data are the best methods for classroom applications, since what the subjects claimed to be effective methods may not always be the ones actually used or encouraged by teachers. However, this kind of study has the fundamental value that it can inform teachers of what learners believe about vocabulary learning strategies and particular cultural keywords. Teachers need such information in order to help to consolidate or transform such strategies.

10.6 Suggestions for further research

It is proposed that further investigations can be undertaken in the following eight domains.

(1) To investigate how learners' learn vocabulary, a longer time period would be ideal to conduct additional observations, tests or asking students to keep their own learning journals. These research methods may then provide specific longitudinal confirmation of the results of the general questionnaire and interview data.

(2) Where the study focussed on learners' beliefs of their vocabulary learning strategies, a further study should examine students' actual learning behaviours in normal classes. This could be done (with difficulty) by observation or experimentally in particular teaching sessions or through think-aloud monitoring out of class or in language laboratories. In addition, investigations on teachers, teaching plans, syllabus, teaching and learning materials, tasks or activities may also be important angles to focus on rather than simply on learners' variables.

(3) More attention needs to be paid to British learners of Mandarin in either a specific research investigation or in cross-cultural comparative studies. This might not only attain more statistical validity, as called for from this study, but give more

substantial data on an important group of learners (given the studies of Chinese). But there is a lack of research studies on this group as a "learning minority" in Britain, although there is an increasing number of British students learning Mandarin as a foreign language. There should be more attention paid to how they learn vocabulary.

(4) The exploration of the knowledge of cultural keywords is necessary for further application. This may not necessarily mean duplicating the present questionnaire. Further computer-assisted or corpus linguistic programmes are needed to develop more standardised keywords and their definitions through researching specific cultural materials (e.g. Scott 1997). Moreover, when selecting target translations for any particular cultural keyword, frequency checking and contexts of occurrence should be taken into account.

(5) Using multi-media has become more and more popular, and many learning materials can be found through the Internet. As assistance and assessment of helping learners to learn through the modern technology can be important, further research investigation needs to consider including this learning aspect.

(6) This study did not investigate how much teachers know about how their students learn, the frequency of the types of vocabulary learning strategies used in classrooms, and the extent of any gap between teachers' and learners' awareness of vocabulary learning strategies. While it is possible that students' learning can be influenced by the academic culture of their institutions, it is reasonable to suppose that L2 learners' teachers can also influence the ways they learn. It is, therefore, useful to investigate teachers' beliefs of vocabulary teaching strategies. This is particularly important when cross-cultural teaching and learning interact, as where the gap between teachers' and learners' assumption and practice is smaller, the more successful L2 vocabulary acquisition can be facilitated.

(7) The design of this study could be extended to further groups, taking the notion of asymmetry into account, e.g. Chinese learners of French and French learners of Chinese.

(8) Results obtained from this exploratory findings may serve as a basis to move forward to find out what success different methods may bring through experimental devices (Cohen 1987; Thompson 1987b).

10.7 Final personal remarks

The overall findings of this study (see Figure 10.1) bring out three important perspectives in the light of studies of vocabulary acquisition, learners' strategies, and culture. First, it is useful to understand the cultural gaps between different groups of learners, in this case between British and Chinese in terms of learning knowledge and learning (or teaching) methods. Second, it helps researchers and perhaps students to understand learners' beliefs of learning vocabulary, which is the first step of bringing about improved learners' awareness, and of training learners to be responsible of their own learning. Alternatively, such understanding of knowing what learners do (see point 6 above) is also required in class for language teachers in order to broaden their students' perspectives of vocabulary learning strategies. Third, this study is helpful for reducing "prejudice" of vocabulary learning strategies, since to learn lexis must necessarily involve many aspects of vocabulary strategies. Some prejudice against, say, repetitive practice and memorisation (often dismissed as rote learning) might be reduced if students actual experiences are seen to validate such methods in the context of combining them with other methods. Here, the British learners of Mandarin had to some extent adopted Chinese methods of learning; while these seemed to go against the grain of current communicative methods, the British students found them both useful and necessary. As emphasised earlier in this chapter, this is an important demonstration of acculturation regarding vocabulary learning strategies.

On a final note, regarding the researchers' own personal studying process, she has come to learn the importance of cultural awareness (in relation to Chinese and British cultures) in three aspects: researching, teaching, and learning. That is, she has come to appreciate different cultural perspectives on vocabulary learning strategies in the role of

a researcher designing a project and analysing data, in the role of a teacher considering different perspectives from different groups of students, and in the role of a learner or student (novice researcher) herself. Such awareness is important to equip her for further development in cross-cultural vocabulary pedagogy. In addition, it is crucial that the three aspects are in triangulation, each of which links with the others, i.e. the researcher as a teacher and the researcher as a learner. This may reflect the idea of action research which not only focuses on the theoretical findings of research studies but considers the practice in reality and acts to improve cross-cultural 'learning or learner-centeredness' plus 'researching, teaching and learning collaboration' in L2 pedagogic contexts.

References

Abraham, R. G. and Vann, R. J. 1987. Strategies of two language learners: a case study. In Wenden, A. and Rubin, J. (Eds.) *Learner Strategies in Language Learning*. Cambridge: Prentice Hall, pp. 85-102.

Aebersold, J. A. and Field, M. L. 1997. *From Reading to Reading Teacher: Issues and Strategies for Second Language Classrooms*. Cambridge: Cambridge University Press.

Ahmed, M. O. 1989. *Vocabulary learning strategies*. In Meara, P. (Ed.) Beyond Words. London: Centre for Information on Language Teaching and Research, pp. 3-14.

Aitchison, J. 1992. Good birds, better birds, and amazing birds: the development of prototypes. In Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan, pp. 71-84.

Aitchison, J. 1994. *Words in the Mind: An Introduction to the Mental Lexicon* (2nd Ed.). Oxford: Blackwell.

Allen, V. F. 1983. *Techniques in Teaching Vocabulary*. Oxford: Oxford University Press.

Allinson, R. E. (Ed.) 1991. *Understanding the Chinese Mind: the Philosophical Roots*. Hong Kong: Oxford University Press.

Alptekin, C. 1993. Target-language culture in EFL materials. *ELT Journal* 47/2: 136-143.

Arnaud, P. J. L. and Béjoint, H. (Eds.) 1992. *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan.

Aron, A. and Aron A. 1994. *Statistics for Psychology*. New Jersey: Prentice Hall International.

Asian Language Notes (1978): Some Likely Areas of Difficulty for Asian Learners of English. No.1. Burmese, Chinese, Khmer, Vietnamese (2nd Ed.). Canberra, Australia: Language Teaching Branch, Commonwealth Department of Education, pp. 10-21.

Atkinson, R. C. 1975. Mnemotechnics in second-language learning. *American Psychologist* 30: 821-828.

Babbie, E. 1990. *Survey Research Methods*. California: Wadsworth.

Bahns, J. 1993. Lexical collocations: a contrastive view. *ELT Journal* 47/1: 56-63.

Barrow, R. 1990. Culture, values and the language classroom. Harrison, B. (Ed.) *Culture and the Language Classroom*. London: Modern English Publications/British Council, pp. 3-10.

Bassnett, S. 1991. *Translation Studies*. London: Routledge.

Bauer, L. 1983. *English Word-Formation*. Cambridge: Cambridge University Press.

Bauer, L. and Nation, P. 1993. Word families. *International Journal of Lexicography* 6/4: 253-279.

Baxter, J. 1980. The dictionary and vocabulary behavior: a single word or a handful? *TESOL Quarterly* 14/3: 325-336.

Bedell, D. A. and Oxford, R. L. 1996. Cross-cultural comparisons of language learning strategies in the People's Republic of China and other countries. In Oxford, R. L. (Ed.) *Language Learning Strategies around the World: Cross-cultural Perspectives*. Honolulu: Second Language Teaching and Curriculum Center, Univeristy of Hawai'i, pp. 47-60.

Beglar, D. and Hunt, A. 1999. Revising and validating the 2000 word level and university word level vocabulary tests. *Language Testing* 16/2: 131-162.

Beheydt, L. 1987. The semantization of vocabulary in foreign language learning. *System* 15/1: 55-67.

Bell, J. S. 1993. Discussion of Kerfoot and Wrigley: the teacher as bridge between programme and practice. *TESOL Quarterly* 27/3: 467-475.

Bell, J. S. 1995. The relationship between L1 and L2 literacy: some complicating factors. *TESOL Quarterly* 29/4: 684-704.

Bellezza, F. S. 1981. Mnemonic devices: classification, characteristics, and criteria. *Review of Education* 51/2: 247-275.

Bensoussan, M. 1992. Learners' spontaneous translations in an L2 reading comprehension task: vocabulary knowledge and use of schemata. In Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan, pp. 102-112.

Bensoussan, M. and Laufer, B. 1984. Lexical guessing in context in EFL reading comprehension. *Journal of Research in Reading* 7/1: 15-32.

Bialystok, E. 1985. The compatibility of teaching and learning strategies. *Applied Linguistics* 6/3: 255- 262.

Bishop, G. 1998. Research into the use being made of bilingual dictionaries by language learners. *Language Learning Journal* 18: 3-8.

Biggs, J. 1994. What are effective schools? Lessons from East and West. *Australian Educational Researcher* 21/1: 19-39.

Biggs, J. 1996. Learning, schooling, and socialization: a Chinese solution to a Western problem. In Lau, S. (Ed.) *Growing up the Chinese Way*. Hong Kong: The Chinese University Press, pp. 147-167.

Biggs, J. 1998. Learning from the Confucian heritage: so size doesn't matter? *International Journal of Educational Research* 29: 723-738.

Biskup, D. 1992. L1 influence on learners' rendering of English collocations: a Polish/German Empirical study. In Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan, pp. 85-93.

Bloom, A. H. 1981. *The Linguistic Shaping of Thought: A Study in the Impact of Language on Thinking in China and the West*. New Jersey: Lawrence Erlbaum.

Bogdan, R. C. and Biklen, S. K. 1992. *Qualitative Research for Education: An Introduction for Theory and Methods*. Boston: Allyn and Bacon.

Bond, M. H. (Ed.) 1986. *The Psychology of the Chinese People*. Oxford: Oxford University Press.

Bond, M. H. 1991. *Beyond the Chinese Face: Insights from Psychology*. New York: Oxford University Press.

Bond, M. H. (Ed.) 1996. *The Handbook of Chinese Psychology*. Hong Kong: Oxford University Press.

Borg, W. R. and Gall, M. D. 1989. *Educational Research* (5th Ed.). New York: Longman.

Bremner, S. 1997. Language learning strategies and language proficiency: causes or outcomes? *Perspectives (working papers)* 9/2: 6-35.

Bremner, S. 1998. Language learning strategies and language proficiency: investigating the relationship in Hong Kong. *Asia Pacific Journal of Language in Education* 1/2: 67-92.

Brick, J. 1991. *China: A Handbook in International Communication*. Sydney: Macquarie University.

Brown, C. and Payne, M. E. 1994. *Five essential steps of process in vocabulary learning*. Paper presented at the TESOL Convention, Baltimore, Md.

Brown, T. and Haynes, M. 1985. Literacy background and reading development in a second language. In Carr, T. H. (Ed.) *The Development of Reading Skills*. San Francisco: Jossey-Bass, pp. 19-34.

Brown, T. S. and Perry F. L. 1991. A comparison of three learning strategies for ESL vocabulary acquisition. *TESOL Quarterly* 25/4: 655-670.

Brown, H. D. 1994. *Principles of Language Learning and Teaching* (3rd Ed.). New Jersey: Prentice Hall.

Brumfit, C. 1984. *Communicative Methodology in Language Teaching: The Roles of Fluency and Accuracy*. Cambridge: Cambridge University Press.

Brumfit, C. and Johnson, K. 1979. *The Communicative Approach to Language Teaching*. Oxford: Oxford University Press.

Bryman, A. and Cramer, D. 1997. *Quantitative Data Analysis with SPSS for Windows*. London: Routledge.

Byram, M. 1988. 'Post-communicative' language teaching. *British Journal of Langauge Teaching* 26/1: 3-6.

Byram, M. 1989. *Cultural Studies in Foreign Language Education*. Clevedon: Multilingual Matters.

Byram, M. 1997. 'Cultural awareness' as vocabulary learning. *Language Learning Journal* 16: 51-57.

Byram, M. 1999. Standards for foreign language learning and the teaching of culture. *Language Learning Journal* 19: 61-68.

Byram, M. and Esarte-Sarries, V. 1991. *Investigating Cultural Studies in Foreign Language Teaching: A Book for Teachers*. Clevedon: Multilingual Matters.

Byram, M. and Fleming, M. (Eds.) 1998. *Language Learning in Intercultural Perspective: Approaches through Drama and Ethnography*. Cambridge: Cambridge University Press.

Cajkler, W. and Addelman, R. 1992. *The Practice of Foreign Language Teaching*. London: David Fulton Publishers.

Cajkler, W. and Thornton, B. 1999. Language learner perceptions of strategy use in secondary schools. *Language Learning Journal* 20: 45-50.

Cameron, C. 1994. Review of cross-cultural pragmatics: the semantic of human interaction by Anna Wierzbicka. *International Journal of Intercultural Relations* 19/2: 335-339.

Cameron, L. and Low, G. 1999. *Researching and Applying Metaphor*. Cambridge: Cambridge University Press.

Carrell, P. L. 1984. Schema theory and ESL reading: classroom implications and applications. *The Modern Language Journal* 68/4: 332-343.

Carter, R. 1987. Is there a core vocabulary? Some implications for language teaching. *Applied Linguistics* 8/2: 178-193.

Carter, R. 1988. Vocabulary, cloze, and discourse. In Carter, R. and McCarthy, M. (Eds.) *Vocabulary and Language Teaching*. London: Longman, pp. 161-180.

Carter, R. 1998. *Vocabulary: Applied Linguistic Perspectives* (2nd Ed.). London: Routldge.

Carter, R. and McCarthy, M. (Eds.) 1988a. *Vocabulary and Language Teaching*. London: Longman.

Carter, R. and McCarthy, M. 1988b. Lexis and discourse: vocabulary in use. In Carter, R. and McCarthy, M. (Eds.) *Vocabulary and Language Teaching*. London: Longman, pp. 201-220.

Chamot, A. U. 1987. The learning strategies of ESL students. In Wenden, A. and Rubin, J. (Eds.) *Learner Strategies in Language Learning*. Cambridge: Prentice Hall, pp. 71-84.

Chang, J. 1987. Chinese speakers. In Swan, M. and Smith, B. (Eds.) *Learner English: A Teacher's Guide to Interference and Other Problems*. Cambridge: Cambridge University Press, pp. 224-237.

Channell, J. 1981. Applying semantic theory to vocabulary teaching. *ELT Journal* 35/2: 115-122.

Channell, J. 1988. Psycholinguistic considerations in the study of L2 vocabulary acquisition. In Carter, R. and McCarthy, M. (Eds.) *Vocabulary and Language Teaching*. London: Longman, pp. 83-96.

Chappell, H. 1994. Mandarin semantic primitives. In Goddard, C. and Wierzbicka, A. (Ed.) 1994. *Semantical and Lexical Universal: Theory and Empirical Findings*. Amsterdam: John Benjamins, pp. 109-147.

Chen, H. C. and Graves, M. F. 1995. Effects of previewing and providing background knowledge on Taiwanese college students' comprehension of American short stories. *TESOL Quarterly* 29/4: 663-686.

Chen, J. Y. 1998. *Yingwen danzi quwei jiyifa (Memorisation by fun)*. Taipei: Learning Publishing Co., Ltd.

Chen, L. L. 1997. *Indexing English Words: ying danzi fenlei jiyifa (Memorisation by classifying words)*. Taipei: Learning Publishing Co., Ltd.

Cheng, H. 1996. Teachers' and students' beliefs about foreign language learning. *The Proceedings of the 13th ROC TEFL*. Taipei, Taiwan: Department of Foreign Language and Literature, National Tsing Hua University, pp. 185-194.

Chern, C. L. 1993. Chinese students' word-solving strategies in reading in English. In Huckin, T., Haynes, M., and Coady, J. (Eds.) *Second Language Reading and Vocabulary Learning*. Norwood, NJ: Ablex., pp. 67-85.

Cheung, Y. S. 1992. The form and meaning of digraphia: the case of Chinese. In Bolton, K. and Kwok, H. (Eds.) *Sociolinguistics Today: International Perspectives*. London: Routledge, pp. 207-217.

Chia, H. 1996. Making a guess: Guidelines for teaching inference of word meaning. In Katchen, J. and Leung, Y. (Eds.) *The Proceedings of the 5th International Symposium on English Teaching*. Taipei: ETAROC/The Crane, pp. 145-150.

Chikamatsu, N. 1996. The effects of L1 orthography on L2 word recognition: a study of American and Chinese learners of Japanese. *Studies in Second Language Acquisition* 18/4: 403-432.

Choo, A. B. 1994. The teaching of Chinese language in Singapore. In Gopinathan, S., Pakir, A., Kam, H. W. and Saravanan, V. (Eds.) *Language, Society and Education in Singapore: Issues and Trends*. Singapore: Times Academic Press, pp. 313-329.

Clarke, D. F. and Nation, I. S. P. 1980. Guessing the meanings of words from context: strategy and techniques. *System* 8: 211-220.

Coady, J. 1993. Research on ESL/EFL vocabulary acquisition: putting it in context. In Huckin, T., Haynes, M., and Coady, J. (Eds.) *Second Language Reading and Vocabulary Learning*. Norwood, NJ: Ablex, pp. 3-23.

Coady, J. and Huckin, T. (Eds.) 1997. *Second Language Vocabulary Acquisition*. Cambridge: Cambridge University Press.

Coe, N. 1997. Vocabulary must be learnt, not taught. *MET* 6/7: 47-48.

Coffey, B. and Atkinson, P. 1996. *Making Sense of Qualitative Data: Complimentary Research Strategies*. Thousand Oaks: Sage.

Cohen, A. 1987a. Studying learner strategies: how we get the information. In Wenden, A. and Rubin, J. (Eds.) *Learner Strategies in Language Learning*. Cambridge: Prentice Hall, pp. 31-40.

Cohen, A. D. 1987b. Student processing of feedback on their compositions. In Wenden, A. and Rubin, J. (Eds.) *Learner Strategies in Language Learning*. Cambridge: Prentice Hall, pp. 57-69.

Cohen, A. 1987c. The use of verbal and imagery mnemonics in second-language vocabulary learning. *Studies in Second Language Acquisition* 9: 43-62.

Cohen, A. 1990. *Language Learning: Insights for Learners, Teachers, and Researchers*. Boston, MA: Heinle & Heinle.

Cohen, A. 1998. *Strategies in Learning and Using a Second Language*. London: Longman.

Cohen, A. and Aphek, E. 1980. Retention of second-language vocabulary over time: investigating the role of mnemonic associations. *System* 8/3: 221-235.

Cohen, A. and Hosenfeld, C. 1981. Some uses of mentalistic data in second language research. *Language Learning* 31/2: 285-313.

Cohen, A. D. and Scott, K. 1996. A synthesis of approaches to assessing language learning strategies. In Oxford, R. L. (Ed.) *Language Learning Strategies around the World: Cross-Cultural Perspectives*. Honolulu: Second Language Teaching & Curriculum Centre, University of Hawai'i, pp. 89-106.

Cohen, A. D., and Weaver, S. J. 1998. Strategies-based instructions for second language learners. In Renandya, W. A. and Jacobs, G. M. (Eds.). *Learners and Language Learning*. Singapore: SEAMEO Regional Language Centre, pp. 1-25.

Cohen, L. and Manion, L. 1994. *Research Methods in Education* (4th Ed.). London: Routledge.

Cook, G. 1989. *Discourse*. Oxford: Oxford University Press.

Cook, G. 1994. Repetition and learning by heart: an aspect of intimate discourse, and its implications. *ELT Journal* 48/2: 133-141.

Cook, V. 1991. *Second Language Learning and Language Teaching*. London: Edward Arnold.

Coolican, H. 1994. *Research methods and statistics in psychology* (2nd Ed.). London: Hodder & Stoughton.

Cortazzi, M. 1990. Cultural and educational expectations in the language classroom. In Harrison, B. (Ed.) 1990. *Culture and the Language Classroom*. London: Modern English Publications/British Council, pp. 54-65.

Cortazzi, M. 1993. *Narrative Analysis*. London: Falmer.

Cortazzi, M. and Jin, L. 1994. Ways with words - Chinese students learning of English vocabulary. In Li, L. W. P., Yin, Y. M., Chang, A. H., Lin, A. I., and Lin, C. Y. (Eds.) *Papers from the 10th Conference on English Teaching and Learning in the Republic of China*. Taipei: The Crane, pp. 15-28.

Cortazzi, M. and Jin, L. 1996a. Changes in learning English vocabulary in China. In Coleman, H. and Cameron, L. (Eds.) *Change and Language*. Clevedon: BAAL/Multilingual Matters, pp. 153-165.

Cortazzi, M. and Jin, L. 1996b. English teaching and learning in China. *Language Teaching* 29: 61-80.

Cortazzi, M. and Jin, L. 1996c. Cultures of learning: language classrooms in China. In Coleman, H. (Ed.) *Society and the Language Classroom*. Cambridge: Cambrisge University Press, pp. 169-206.

Cortazzi, M. and Jin, L. 1999. Cultural mirrors: materials and methods in the EFL classroom. In Heinkel, E. (Ed.) *Culture in Second Language Teaching and Learning*. Cambridge: Cambridge University Press, pp. 196-219.

Cortazzi, M. and Jin, L. 2000. Evaluating evaluation in narrative. In Hunston, S. and Thompson, G. (Eds.) *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Oxford: Oxford University Press, pp. 102-120.

Cotterall, S. 1995. Developing a course strategy for learner autonomy. *ELT Journal* 49/3: 219-227.

Cowie, A. P. 1988. Stable and creative aspects of vocabulary use. In Carter, R. and McCarthy, M. (Eds.) *Vocabulary and Language Teaching*. London: Longman, pp. 126-139.

Cowie, A. P. 1992. Multiword lexical units and communicative language teaching. In Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan, pp. 1-12.

Crookes, G. 1998. On the relationship between second and foreign language teachers and research. *TESOL Journal*: 6-10

Cruse, D. A. 1986. *Lexical Semantics*. Cambridge: Cambridge University Press.

Danan, M. 1995. Reversed subtitling and dual coding theory: new directions for foreign language instruction. In Harley, B. (Ed.) *Lexical Issues in Language Learning*. Amsterdam: John Benjamins, pp. 253-282.

D'Anna, C. A., Zechmeister, E. B. and Hall, J. W. 1991. Toward a meaningful definition of vocabulary size. *Journal of Reading Behavior* 23/1: 109-122.

Davis, J. N. 1989. Facilitating effects of marginal glosses on foreign language reading. *The Modern Language Journal* 73/1: 41-48.

Dean, J. P. and Whyte, W. F. 1958. 'How do you know if the informant is telling the truth?' *Human Organisation* 17: 34-38.

De Francis, J. 1984. *The Chinese Language: Fact and Fantasy*. Honolulu: University of Hawaii Press.

De Mente, B. L. 1996. *NTC's Dictionary of China's Cultural Code Words*. Illinois: NTC Publishing Group.

Descamps, J. L. 1992. Towards classroom concordancing. In Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan, pp. 167-181.

Deschamps, A. 1992. From spelling to sound: English graphematics as an aid to vocabulary acquisition. Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan, pp. 182-195.

Dey, I. 1993. *Qualitative Data Analysis: a User-Friendly Guide for Social Scientists*. London: Routledge.

Dillon, J. T. 1990. *The Practice of Questioning*. London: Routledge.

Ding, Y. 1987. Lexical transfer and vocabulary teaching in senior high school. In Huang, T. L., Huang, Y. H., Chang, W. C. Chen, C. R. Chen, L. W., and Chen, C. J. (Eds.) *The 4th Conference on English Teaching and Learning in the Republic of China*. Taipei: The Crane, pp. 375-383.

Dirven, R. and Pütz, M. 1993. Intercultural communication. *Language Teaching* 26: 144-156.

Drever, E. 1995. *Using Semi-Structured Interviews in Small-Scale Research: a Teacher's Guide*. Glasgow: Scottish Council for Research in Education.

Dubin, F. 1989. The odd couple: reading and vocabulary. *ELT Journal* 43/4: 283-287.

Duquette, L. and Painchaud, G. 1996. A comparison of vocabulary acquisition in audio and video contexts. *The Canadian Modern Language Review* 53/1: 143-172.

Eco, U. 1997. *The Search for the Perfect Language*. London: Fontana Press.

Ehrman, M. and Oxford, R. 1989. Effects of sex differences, career choice, and psychological type on adult language learning strategies. *The Modern Language Journal* 73/1: 1-13.

Ehrman, M. and Oxford, R. 1990. Adult language learning styles and strategies in an intensive training setting. *The Modern Language Journal* 73/4: 311-327.

Elhelou, M. 1994. Arab children's use of the keyword method to learn English vocabulary words. *Educational Research* 36/3: 295-302.

Eliason, P. A. 1995. Difficulties with cross-cultural learning-styles assessment. In Reid, J. (Ed.) *Learning Styles in the ESL EFL Classroom*. Boston: Heinle & Heinle, pp. 19-33.

Ellis, N. C. 1994. Consciousness in second language learning: psychological perspectives on the role of conscious process in vocabulary acquisition. *AILA Review* 11: 37-56.

Ellis, N. C. 1997. Vocabulary acquisition: word structure, collocation, word-class, and meaning. In Schmitt, N. and McCarthy, M. (Eds.) *Vocabulary: Description, Acquisition, and Pedagogy*. Cambridge: Cambridge University Press, pp. 122-139.

Ellis, N. C. and Beaton, A. 1995. Psycholinguistic determinants of foreign language vocabulary learning. In Harley, B. (Ed.) *Lexical Issues in Language Learning*. Amsterdam: John Benjamins, pp. 107-165.

Ellis, R. 1989. Classroom learning styles and their effect on second language acquisition: a study of two learners. *System* 17/2: 249-262.

Ellis, R. 1995. Modified oral input and the acquisition of word meanings. *Applied Linguistics* 16/4: 409-441.

Ellis, R. and Heimbach, R. 1997. Bugs and birds: children's acquisition of second language vocabulary through interaction. *System* 25/2: 247-259.

Ellis, R., Tanaka, Y. and Yamazaki, A. 1994. Classroom interaction, comprehension, and the acquisition of L2 word meanings. *Language Learning* 44/3: 449-491.

Ellis, R, Tanaka, T. and Yamazaki, A. 1995. Classroom interaction, comprehension, and the acquisition of L2 word meanings. In Harley, B. (Ed.) *Lexical Issues in Language Learning*. Amsterdam: John Benjamins, pp. 187-228.

Fan, M. Y. 1998. An investigation into the problem of recoding technical vocabulary. *Asia-Pacific Journal of Teacher Education & Development* 1/1: 83-92.

Farghal, M. and Obiedat, H. 1995. Collocations: a neglected variable in EFL. *IRAL* 33/4: 315-331.

Fielding, N. 1993. Qualitative interviewing. In Gilbert, N. (Ed.) *Researching Social Life*. London: SAGE Publications, pp. 135-153.

Flick, U. 1998. *An introduction to qualitative research*. London: SAGE.

Flowerdew, J. 1993. Concordancing in language learning. *Prospectives* 5/2: 87-101.

Foster, J. J. 1998. *Data Analysis Using SPSS for Windows: A Beginner's Guide*. London: SAGE Publications.

Freeman, M. 1999. The language learning activities of students of EFL and French at two universities. *Language Learning Journal* 19: 80-88.

Fung, Y. L. 1966. *A Short History of Chinese philosophy. New York: The Free Press.*

Gabrenya, W. K. and Hwang, K. K. 1996. *Chinese social interaction: harmony and hierarchy on the good earth. In Bond, M. (Ed.) The Handbook of Chinese Psychology. Hong Kong:* Oxford University Press, pp. 309-321.

Gairns, R. and Redman, S. 1986. *Working with Words.* Cambridge: Cambridge University Press.

Gale, X. L. 1992. The untranslatability of cultural differences: the problem of *Chou. Language Quarterly* 30: 11-17.

Gao, G. and Ting-Toomey, S. 1998. *Communicating Effectively with the Chinese.* Thousand Oaks: Sage Publications.

Gass, S. and Selinker, L. (Eds.) 1983. *Language Transfer in Language Learning.* Rowley, MA: Newbury House.

Gelman, S. A. and Byrnes, J. P. (Eds.) 1991. *Perspectives on Language and Thought: Interrelations in Development.* Cambridge: Cambridge University Press.

Giles, H. A. 1984. *San Zi Jing: Elementary Chinese.* Taipei: Confucius Publishing.

Goddard, C. 1994. Semantic theory and semantic universals. In Goddard, C. and Wierzbicka, A. (Ed.) 1994. *Semantical and Lexical Universal: Theory and Empirical Findings.* Amsterdam: John Benjamins, pp. 7-29.

Goddard, C. 1997. Cultural values and 'cultural scripts' of Malay (Bahasa Melayu). *Journal of Pragmatics* 27: 183-201.

Goddard, C. 1998. *Semantic Analysis: A Practical Introduction.* Oxford: Oxford University Press.

Goddard, C. 1999. Cultural semantics and intercultural communication. Paper presented to *the 4th Cross-Cultural Capability Conference* at Leeds Metropolitan University, Leeds.

Goddard, C. and Wierzbicka, A. (Ed.) 1994. *Semantical and Lexical Universal: Theory and Empirical Findings.* Amsterdam: John Benjamins.

Goddard, C. and Wierzbicka, A. 1997. *Discourse and culture.* In van Dijk, T. A. (Ed.) *Discourse as Social Interaction.* London: Sage, pp. 231-257.

Goh, C. and Kwah, P. F. 1997. Chinese ESL students' learning strategies: a look at frequency, proficiency, and gender. *Hong Kong Journal of Applied Linguistics* 2/1: 39-53.

Gough, C. 1996. Words and words: helping learners to help themselves with collocations. *MET* 5/1: 32-36.

Goulden, R., Nation, P. and Read, J. 1990. How large can a receptive vocabulary be? *Applied Linguistics* 11: 341-363.

Green, D. and Meara, P. 1987. The effects of script on visual search. *Second Language Research* 4: 102-117.

Green, J. M. and Oxford, R. 1995. A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly* 29/2: 261-297.

Grenfell, M. and Harris, V. 1993. How do pupils learn? (Part 1). *Language Learning Journal* 8: 22-25.

Grenfell, M. and Harris, V. 1998. Learner strategies and the advanced language learner: problems and processed. *Language Learning Journal* 17: 23-28.

Gruneberg, M. and Sykes, R. 1991. Individual differences and attitudes to the keyword method of foreign language learning. *Language Learning Journal* 4: 60-62.

Gu, X. C. 1997. An experiment into the effectiveness of teaching guessing strategies in processing vocabulary in a text. *Teaching English in China, ELT Newsletter* 29: 7-12.

Gu, Y. and Johnson, R. K. 1996. Vocabulary learning strategies and language learning outcomes. *Language Learning* 46/4: 643-679.

Hague, S. A. 1987. Vocabulary instruction: what L2 can learn from L1. *Foreign Language Annals* 20/3: 217-225.

Hall, D. L. and Ames, R. T. 1987. *Thinking Through Confucius*. New York: State University of New York Press.

Halls, D. and Beggs, E. 1998. Defining learner autonomy. In Renandya, W. A. and Jacobs, G. M. (Eds.) *Learners and Language Learning*. Singapore: SEAMEO Regional Language Centre, pp. 26-39.

Harbord, J. 1992. The use of the mother tongue in the classroom. *ELT Journal* 46/4: 350-355.

Harley, B. (Ed.) 1995. *Lexical Issues in Language Learning*. Amsterdam: John Benjamins.

Harmer, J. 1991. *The Practice of English Language Teaching*. London: Longman.

Harrison, B. (Ed.) 1990. *Culture and the Language Classroom*. London: Modern English Publications/British Council.

Harper, W. M. 1991. *Statistics* (6th Ed.) London: Longman.

Hatch, E. and Brown, C. 1995. *Vocabulary, Semantics, and Language Education*. Cambridge: Cambridge University Press.

Hatch, E. and Lazaraton, A. 1991. *The Research Manual: Design and Statistics for Applied Linguistics*. New York: Newbury House Publishers.

Hatim, B. and Mason, I. 1990. *Discourse and the Translator*. London: Longman.

Hartzell, R. W. 1988. *Harmony in Conflict: Active Adaptation to Life in Present-day Chinese Society*. Taipei, Taiwan: Caves Books.

Haynes, M. and Baker, I. 1993. American and Chinese readers learning from lexical familiarization in English text. In Huckin, T., Haynes, M., and Coady, J. (Eds.) *Second Language Reading and Vocabulary Learning*. Norwood, NJ: Ablex, pp. 130-152.

Haynes, M. and Carr, T. H. 1990. Writing system background and second language reading: a component skills analysis of English reading by native speakers - readers of Chinese. In Carr, T. H. and Levy, B. A. (Eds.) *Reading and Its Development: Component Skills Approaches*. Orlando, FL: Academic Press, pp. 375-421.

Hazenberg, S. and Hulstijn, J. H. 1996. Defining a minimal receptive second-language vocabulary for non-native university students: an empirical investigation. *Applied Linguistics* 17/2: 145- 163.

He, Y. 1998. Traditional and communicative approaches in China's college English teaching. In Parry, K. (Ed.) 1998. *Culture, Literacy, and Learning English: Voices from the Chinese Classroom*. Portsmouth, NH: Boyton/Cook Publishers, pp. 152-156.

Heafford, M. 1990. Teachers may teach, but do learners learn? *Language Learning Journal* 1: 88-90.

Hedderson, J. and Fisher, M. 1993. *SPSS Made Simple* (2nd Ed.). California: Wadsworth Publishing Company.

Heltai, P. 1989. Teaching vocabulary by oral translation. *ELT Journal* 43/4: 288-293.

Heuring, C. and Rong, Z. 1995. Distance learning strategies in China: using the strategy inventory for language learning to compare distance and classroom learners in China. *Hong Kong Polytechnic University: Working Papers in ELT & Applied Linguistics* 1/2: 95-110.

Heusinkveld, P. R. 1997. *Pathways to Culture*. Yarmouth, ME: Intercultural Press.

Hinkel, E. (Ed.) 1999. *Culture in Second Language Teaching and Learning*. Cambridge: Cambridge University Press.

Hinton, P. R. 1995. *Statistics Explained: A Guide for Social Science Students*. London: Routledge.

Hirsh, D. and Nation, P. 1992. What vocabulary size is needed to read unsimplified texts for pleasure? *Reading in a Foreign Language* 8/2: 689-696.

Ho, D. Y. F. 1996. Filial piety and its psychological consequences. In Bond, M. H. (Ed.) 1996. *The Handbook of Chinese Psychology*. Hong Kong: Oxford University Press, pp. 155-165.

Holden, W. R. 1996. Categorise to recognise: seven ways to improve vocabulary. *MET* 5/3: 32-35.

Holec, H. 1987. The learner as manager: managing learning or managing to learn? In Wenden, A. and Rubin, J. (Eds.) *Learner Strategies in Language Learning*. Cambridge: Prentice Hall, pp. 145-158.

Holliday, A. 1994. *Appropriate Methodology and Social Context*. Cambridge: Cambridge University Press.

Hong, J. L. 1989. Teaching vocabulary to non-native speakers at three levels. In Chen, C. C., Chen, C. C., Fu, H. F. Chang, Y. C., and Hsiao, Y. T. (Eds.) *The Fifth Conference on English Teaching and Learning in the Republic of China*. Taipei: The Crane, 155-171.

Hong, S. and Huang, S. C. 1998. Memory strategies used by non-English major EFL students. In Katchen, J. and Leung, Y. N. (Eds.) *The Proceedings of the Seventh International Symposium on English Teaching*. Taipei: ETAROC/The Crane, pp. 395-405.

Horst, M., Cobb, T. and Meara, P. 1998. Beyond a clockwork orange: acquiring second language vocabulary through reading. *Reading in a Foreign Language* 11/2: 207-223.

Horwitz, E. K. 1987. Surveying student beliefs about language learning. In Wenden, A. and Rubin, J. (Eds.) *Learner Strategies in Language Learning*. Cambridge: Prentice Hall, pp. 119-129.

Hsia, S., Chung, P. K., and Wong, D. 1995. ESL learners' word organisation strategies: a case of Chinese learners of English words in Hong Kong. *Language and Education* 9/2: 81-102.

Hsieh, L. T. 1996. Group work and vocabulary learning. In Katchen, J., and Leung, Y. N. (Eds.) *The Proceedings of the 5th International Symposium on English Teaching*. Taipei: ETAROC/The Crane, pp. 159-167.

Huang, C. 1997. *The Analects of Confucius* (*Lun Yu*). Oxford: Oxford University Press.

Huang, S. C. 1998. Senior high school students' EFL learning beliefs: a site study. In Katchen, J. and Leung, Y. N. (Eds.) *The Proceedings of the Seventh International Symposium on English Teaching*. Taipei:ETAROC/The Crane, pp. 477-486.

Huang, S. F. 1982. Chinese concepts of a person - an essay on language and metaphysics. *Journal of Chinese Linguistics* 10/1: 86-107.

Huang, S. F. 1987. Two studies of prototype semantics: *xiao* 'filial piety' and *mei mianzi* 'loss of face'. *Journal of Chinese Linguistics* 15/1: 55-88.

Huckin, T., Haynes, M., and Coady, J. (Eds.) 1993. *Second Language Reading and Vocabulary Learning*. Norwood, NJ: Ablex.

Huda, N. 1998. Relationship between speaking proficiency, reflectivity-impulsivity, and L2 learning strategies. In Renandya, W. A. and Jacobs, G. M. (Eds.) *Learners and Language Learning*. Singapore: SEAMEO Regional Language Centre, pp. 40-55.

Hudson-Ross, S. and Dong, Y. R. 1990. Literacy learning as a reflection of language and culture: Chinese elementary school education. *The Reading Teacher* 44/2: 110-123.

Hulstijn, J. H. 1992. Retention of inferred and given word meanings: experiments in incidental vocabulary learning. In Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. London: Macmillan, pp. 113-125.

Hulstijn, J. H., Hollander, M. and Greidanus, T. 1996. Incidental vocabulary learning by advanced foreign language students: the influence of marginal glosses, dictionary use, and reoccurrence of unknown words. *The Modern Language Journal* 80/3: 327-339.

Hwang, K. and Nation, P. 1989. Reducing the vocabulary load and encouraging vocabulary learning through reading newspapers. *Reading in a Foreign Language* 6/1: 323-335.

Ilson, R. (Ed.) 1985. *Dictionaries, Lexicography and Language Learning*. Oxford: Pergamon.

Jackson, H. 1988. *Words and Their Meaning*. London: Longman.

Jacobs, G. M., Dufon, P. and Hong, F. C. 1994. L1 and L2 vocabulary glosses in L2 reading passages: their effectiveness for increasing comprehension and vocabulary knowledge. *Journal of Research in Reading* 17/1: 19-28.

James, C. 1980. *Contrastive Analysis*. London: Longman.

Jiang, L. 1990. A report on the survey of the students' beliefs about foreign language learning. *Teaching English in China, ELT News Letter* 21: 64-70.

Jiang, L. and Jin, L. 1991. Memory strategies. *Teaching English in China, ELT Newsletter* 23: 64-71.

Jiang, Z. 1998. *Zengjin shibei yingwen zihui jiyi nengli (Enhancing ten times of the ability of memorising vocabulary)*. Taipei: DiTeng Publishing Co.

Jin, L. 1992. *Academic Cultural Expectations and Second Language Use: Chinese Postgraduate Students in the UK: A Cultural Synergy Model*. Unpublished PhD thesis, University of Leicester, UK.

Jin, L. and Cortazzi, M. 1993. Cultural orientation and academic language use. In Graddol, D, Thopson, L. and Byram, M. (Eds.) *Language and Culture*. Clevedon: Multilingual Matters, pp. 84-97.

Jin, L. and Cortazzi, M. 1995. A cultural synergy model for academic language use. In Bruthiaux, P., Boswood, T. and Du-Babcock, B. (Eds.) *Explorations in English for Professional Communication*. Hong Kong: City University of Hong Kong, pp. 41-56.

Jin, L. and Cortazzi, M. 1998a. Dimensions of dialogue: large classes in China. *International Journal of Educational Research* 29: 739-761.

Jin, L. and Cortazzi, M. 1998b. The culture the learner brings: a bridge or a barrier? In Byram, M. and Fleming, M. (Eds.) 1998. *Language Learning in Intercultural Perspective: Approaches through Drama and Ethnography*. Cambridge: Cambridge University Press, pp. 98-118.

Joe, A. 1995. Text-based tasks and incidental vocabulary learning. *Second Language Research* 11/2: 149-158.

Joe, A. 1998. What effects do text-based tasks promoting generation have on incidental vocabulary acquisition? *Applied Linguistics* 19/3: 357-377.

Joe, A., Nation, P., and Newton, J. 1996. Vocabulary learning and speaking activity. *English Teaching Forum* 34: 2-7.

Jones, F. R. 1995a. Learning an alien lexicon: a teach-yourself case study. *Second language Research* 11/2: 95-111.

Jones, J. F. 1995b. Self-access and culture: retreating from autonomy. *ELT Journal* 49/3: 228-234.

Jordan, R. R. 1997. *English for Academic Purposes*. Cambridge: Cambridge University Press.

Kang, S. H. 1995. The effects of a context-embedded approach to second-language vocabulary learning. *System* 23/1: 43-55.

Kasper, L. F. 1993. The keyword method and foreign language vocabulary learning: a rationale for its use. *Foreign Language Annals* 26/2: 244-251.

Keeves, J. P. (Ed.) 1997. *Educational Research, Methodology, and Measurement: An International Handbook*. Cambridge: Pergamon.

Kember, D. and Gow, L. 1991. A challenge to the anecdotal stereotype of the Asian student. *Studies in Higher Education* 16/2: 117-128.

Kenny, N. and Johnson, R. 1993. *TARGET: First Certificate*. Oxford: Heinemann.

Kerim-Zade, I. and Pavlov, V. 1989. The semantico-functional variability of words and the teaching of vocabulary to advanced EFL student. *Applied Linguistics* 10/4: 383-391.

Kinnear, P. R. and Gray, C. D. 1994. *SPSS for Windows: Made Simple*. East Sussex: Erlbaum (UK) Taylor & Francis.

Kline, P. 1994. *An Easy Guide to Factor Analysis*. London: Routledge.

Klinmanee, N. and Sopprasong, L. 1997. Bridging the EFL vocabulary gap between secondary and university: a Thai case study. *Guidelines* 19/1: 1-10.

Koda, K. 1989. Effects of L1 orthographic representation on L2 phonological coding strategies. *Journal of Psycholinguistic Research* 18/2: 201-222.

Koda, K. 1997. Orthographic knowledge in L2 lexical processing: a cross-linguistic perspective. In Coady, J. and Huckin, T. (Eds.) *Second Language Vocabulary Acquisition*. Cambridge: Cambridge University Press, pp. 35-52.

Kohn, J. 1992. Literacy strategies for Chinese university learners. In Dubin, F. and Kuhlman, N. (Eds.) *Cross-Cultural Literacy: Global Perspectives on Reading and Writing*. New Jersey: Prentice-Hall, pp. 113-125.

Koller, J. M. 1985. *Oriental Philosophies* (Chapter 16-20). New York: Macmillan, pp. 245-328.

Krashen, S. D. 1989. We acquire vocabulary and spelling by reading: additional evidence for the Input Hypothesis. *The Modern Language Journal* 73: 440-464.

Krashen, S. and Terrell, T. D. 1988. *The Natural Approach: Language Acquisition in the Classroom*. London: Prentice Hall.

Krantz, G. 1991. *Learning Vocabulary in a Foreign Language: A Study of Reading Strategies*. Gothenburg Sweden: ACTA Universitatis Gothoburgensis.

Ku, H. M. 1984. *English Translation of the Analects*. Taipei: The Shin Sheng Daily News.

Lakoff, G. 1987. *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. London: The University of Chicago Press.

Lam, R. W. Y. 1994. Meaning-constructing strategies in English and Chinese writing: effective vs. ineffective writing. In Gopinathan, S., Pakir, A., Kam, H. W. and Saravanan, V. (Eds.) *Language, Society and Education in Singapore: Issues and Trends*. Singapore: Times Academic Press, pp. 330-349.

Lantolf, J. P. 1999. Second culture acquisition: cognitive considerations. In Heinkel, E. (Ed.) *Culture in Second Language Teaching and Learning*. Cambridge: Cambridge University Press, pp. 28-46.

Larking, L. and Jee, R. 1997. Vocabulary learning and teaching in Brunei Darussalam. *Studies in Education* 2: 4-20.

Lau, D. C. 1979. *Confucius: The Analects (Lun Yu)*. London: Penguin.

Laufer, B. 1986. Possible changes in attitude towards vocabulary acquisition research. *IRAL* 24/1: 69-75.

Laufer, B. 1989. What percentage of text-lexis is essential for comprehension? In Lauren, C. and Nordman, M. (Eds.) *Special Language: from Human Thinking to Thinking Machines*. Clevedon: Multilingual Matters, pp. 316-323.

Laufer, B. 1990a. Ease and difficulty in vocabulary learning: some teaching implications. *Foreign Language Annals* 23/2: 147-155.

Laufer, B. 1990b. 'Sequence' and 'order' in the development of L2 lexis: some evidence from lexical confusions. *Applied Linguistics* 11/3: 281-296.

Laufer, B. 1992. How much lexis is necessary for reading comprehension? In Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan, pp. 126-132.

Laufer, B. 1997a. The lexical plight in second language reading: words you don't know, words you think you know, and words you can't guess. In Coady, J. and Huckin, T. (Eds.) *Second Language Vocabulary Acquisition*. Cambridge: Cambridge University Press, pp. 20-34.

Laufer, B. 1997b. What's in a word that makes it hard or easy. In Schmitt, N. and McCarthy, M. (Eds.) *Vocabulary: Description, Acquisition, and Pedagogy*. Cambridge: Cambridge University Press, pp. 140-155.

Laufer, B. 1998. The development of passive and active vocabulary in a second language: same or different? *Applied Linguistics* 19/2: 255-271.

Laufer, B. and Nation, P. 1995. Vocabulary size and use: lexical richness in L2 written production. *Applied Linguistics* 16/3: 307-322.

Laufer, B. and Nation, P. 1999. A vocabulary-size test of controlled productive ability. *Language Testing* 16/1: 33-51.

Laufer, B. and Shmueli, K. 1997. Memorising new words: does teaching have anything to do with it? *RELC Journal* 28/1: 89-108.

Laufer, B. and Sim, D. D. 1985. Taking the easy way out: non-use and misuse of clues in EFL reading. *English Teaching Forum* 23/2: 7-10.

Lazar, G. 1996. Using figurative language to expand students' vocabulary. *ELT Journal* 50/1: 43-51.

Lee, S., Stigler, J. W., and Stevenson, H. W. 1986. Beginning reading in Chinese and English. In Foorman, B. and Siegel, A. (Eds.) *Acquisition of Reading Skills*. Hillsdale, NJ: Lawrence Erlbaum, pp. 123-150.

Legge, J. 1980. *English Translation of the Four Books*. Taipei: Culture Book.

Leong, C. K. 1973. Hong Kong. In Downing, J. (Ed.) *Camparative Reading: Cross-National Studies of Behavior and Processes in Reading and Writing*. New York: The Macmillan, pp. 383-402.

Levenston, E. A. 1979. Second language acquisition: issues and problems. *The Interlanguage Studies Bulletin* 4/2: 147-160.

Lewis, M. 1993. *The Lexical Approach: The State of ELT and a Way Forward*. London: Language Teaching Publications.

Lewis, M. 1997. *Implementing the lexical approach*. Hove: Language Teaching Publications.

Li, D. 1998. "It's always more difficult than you plan, and imagine": teachers' preceived difficulties in introducing the communicative approach in South Korea. *TESOL Quarterly* 32/4: 677-703.

Li, L. 1986. Children's use of the keyword method to learn simple English vocabulary words. In Tang, C., Huang, B. and Liao, C. (Eds.) *The 3rd Conference on English Teaching and Learning in the Republic of China*. Taipei: The Crane, 281-293.

Li, L. Z. 1987. Teaching students to remember difficult English vocabulary by association. In Huang, T. L., Huang, Y. H., Chang, W. C. Chen, C. R. Chen, L. W., and Chen, C. J. (Eds.) *The 4th Conference on English Teaching and Learning in the Republic of China*. Taipei: The Crane, pp. 385-397.

Li, P. E. (Ed.) 1997. *1000 Characters*. Singapore: SNP Publishing.

Li, X. 1988. Effects of contextual cues on inferring and remembering meanings of new words. *Applied Linguistics* 9/4: 402-413.

Li, X. 1998. Vocabulary teaching or vocabulary learning? In Parry, K. (Ed.) 1998. *Culture, Literacy, and Learning English: Voices from the Chinese Classroom*. Portsmouth, NH: Boyton/Cook Publishers, pp. 216-222.

Lin, C. C. 1996. A multifaceted approach to vocabulary instruction. Department of Foreign Language and Literature, National Tsing Hua University (Ed.) *The Proceedings of the 13th ROC TEFL*. Taiwan: National Tsing Hua University, pp. 93-102.

Liu, I. M. 1986. Chinese cognition. In Bond, M. H. (Ed.) *The Psychology of the Chinese People*. Oxford: Oxford University Press, pp. 73-105.

Liu, L. 1992. Teaching vocabulary through collocation. *Teaching English in China, ELT Newsletter* 24: 105-106.

Liu, N. and Nation, I. S. P. 1985. Factors affecting guessing vocabulary in context. *RELC Journal* 16/1: 33-42.

Liu, W. C. 1955. *A Short History of Confucian Philosophy*. London: Penguin.

Liu, X., Deng, E. and Liu, S. 1988. *Practical Chinese Reader: Elementary Course* (Book I). Beijing: The Commercial Press.

Luppescu, S. and Day, R. R. 1995. Reading, dictionaries, and vocabulary learning. In Harley, B. (Ed.) *Lexical Issues in Language Learning*. Amsterdam: John Benjamins, pp. 229-251.

Lyons, J. 1977. *Semantics*. Cambridge: Cambridge University Press.

Lyons, J. 1981. *Language and Linguistics: An Introduction*. Cambridge: Cambridge University Press.

Lyons, J. 1995. *Linguistic Semantics: An Introduction*. Cambridge: Cambridge University Press.

MacLaury, R. E. 1997. The primitives of linguistic meaning. *American Anthropologist* 99/3: 629 –630.

MacWhinney, B. 1995. Language-specific prediction in foreign language learning. *Language Testing* 12/3: 293-320.

Maley, A. 1986. 'XANADU' - "A miracle of rare device": the teaching of English in China'. In Valdes, J. M. (Ed.) *Cultural Bound*. Cambridge: Cambridge University Press, pp. 102-111.

Marco, M. J. L. 1999. Procedural vocabulary: lexical signalling of conceptual relations in discourse. *Applied Linguistics* 20/1: 1-21.

Marton, Dall'Alba, G. and Kun T. L. 1996. Memorizing and understanding: the keys to the paradox? In Watkins, D. A. and Biggs, J. B. (Eds.) *The Chinese Learner: Cultural, Psychological, and Contextual Influences*. Hong Kong: CERC & ACER, pp. 70-83.

McArthur, T. 1998. *Living Words, Language, and the Knowledge Revolutions*. Exeter: University of Exeter Press.

McBeath, N. 1992. When a dictionary lets you down; problems in teaching vocabulary. *Spoken English* 25/1: 53-55.

McCargar, D. F. 1993. Teacher and student role expectations: cross-cultural differences and implications. *Modern Language Journal* 77/2: 192-207.

McCarthy, M. 1984. A new look at vocabulary in EFL. *Applied Linguistics* 5/1: 12-22.

McCarthy, M. 1988. Some vocabulary patterns in conversation. In Carter, R. and McCarthy, M. (Eds.) *Vocabulary and Language Teaching*. London: Longman, pp. 181-200.

McCarthy, M. 1990. *Vocabulary*. Oxford: Oxford University Press.

McCarthy, M. 1991. *Discourse Analysis for Language Teachers*. Cambridge: Cambridge University Press.

McCarthy, M. and Carter, R. 1997. Written and spoken vocabulary. In Schmitt, N. and McCarthy, M. (Eds.) *Vocabulary: Description, Acquisition and Pedagogy*. Cambridge: Cambridge University Press, pp. 20-39.

McDevitt, B. 1997. Learner autonomy and the need for learner training. *Language Learning Journal* 16: 34-39.

McDonough, S. H. 1995. *Strategies and Skill in Learning a Foreign Language*. London: Edward Arnold.

McDonough, S. H. 1999. Learner strategies. *Language Teaching* 32: 1-18.

McIntosh, N. 1997. We can learn from the Pacific Rim. *TES*, 10th January: 23.

McKeown, M. G. 1985. The acquisition of word meaning from context by children of high and low ability. *Reading Research Quarterly* 20/4: 482-496.

McKeown, M. G. and Curtis, M. E. 1987. *The Nature of Vocabulary Acquisition*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

McNab, R. and Crossland, D. 1993. *Avantage 2*. Oxford: Heinemann.

McNeill, A. 1996. Vocabulary knowledge profiles: evidence from Chinese-speaking ESL teachers. *Hong Kong Journal of Applied Linguistics* 1: 39-63.

McWilliam, N. 1998. *What's in a word? Vocabulary Development in Multilingual Classrooms*. Staffordshire: Trentham Books.

Meara, P. 1980. Vocabulary acquisition: a neglected aspect of language learning. *Language Teaching and Linguistics: Abstracts* 13: 221-246.

Meara, P. 1982. Word associations in a foreign language: a report on the Birkbeck vocabulary project. *Nottingham Linguistic Circular* 11/2: 29-38.

Meara, P. 1983. *Vocabulary in a Second Language (Vol. 1)*. London: Centre for Information on Language Teaching and Research (CILT).

Meara, P. 1984. The study of lexis in interlanguage. In Davies, A., Criper, C. and Howatt, A. R. P. (Eds.): *Interlanguage*. Edinburgh: Edinburgh University Press, pp. 225-235.

Meara, P. 1987. *Vocabulary in a Second Language (Vol. 2)*. London: Centre for Information on Language Teaching and Research (CILT).

Meara, P. 1988. Vocabulary size as a placement indicator. In Grunwell, P. (Ed.) *Applied Linguistics in Society*. London: Centre for Information on Language Teaching and Research, pp. 80-87.

Meara, P. 1989. Matrix models of vocabulary acquisition. *AILA Review* 6: 66-74.

Meara, P. 1990. A note on passive vocabulary. *Second Language Research* 6/7: 151-154.

Meara, P. 1992a. Vocabulary in a Second Language (Vol. 3). *Reading in a Foreign Language* 9/1 (complete issue).

Meara, P. 1992b. Network structures and vocabulary acquisition in a foreign language. In Arnaud, P. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. London: Macmillan, 62-70.

Meara, P. 1993. What do students do on a language course? *Language Learning Journal* 8: 26-31.

Meara, P. 1996. The dimensions of lexical competence. In Brown, G., Malmkjaer, K. and Williams, J. (Eds.) *Performance and Competence in Second Language Acquisition*. Cambridge: Cambridge University Press, pp. 35-53.

Meara, P. 1997. Towards a new approach to modelling vocabulary acquisition. In Schmitt, N. and McCarthy, M. (Eds.) *Vocabulary: Description, Acquisition and Pedagogy*. Cambridge: Cambridge University Press, pp. 109-121.

Meara, P. 1998. Reviews: "James Coady and Thomas Huckin (Eds.): Second language vocabulary acquisition: a rationale for pedagogy. Cambridge University Press, 1997". *Applied Linguistics* 19/2: 289-292.

Meara, P. 1999. Test of a model for predicting second language lexical growth through reading. *The Canadian Modern Language Review* 56/2: 308-328.

Meara, P. and Buxton, B. 1987. An alternative to multiple choice vocabulary tests. *Language Testing* 4/2: 142-154.

Meara, P., Lightbown, P. M., and Halter, R. H. 1997. Classrooms as lexical environments. *Language Teaching Research* 1/1: 28-47.

Melka, F. 1997. Receptive vs. productive aspects of vocabulary. In Schmitt, N. and McCarthy, M. (Eds.) *Vocabulary: Description, Acquisition, and Pedagogy*. Cambridge: Cambridge University Press, pp. 84-102.

Melton, C. D. 1990. Bridging the cultural gap: a study of Chinese students' learning style preferences. *RELC Journal* 21/1: 29-54.

Miles, M. B. and Huberman, A. M. 1994. *Qualitative Data Analysis* (2nd Ed.). Thousands Oaks: SAGE Publications.

Milroy, L. 1987. *Observing and Analysing Natural Language: A Critical Account of Sociolinguistic Method*. New York: Basil Blackwell.

Ming, T. S. 1997. Innovative ways to teach vocabulary - some practical ideas for the classroom teacher. *Guidelines* 19/2: 11-21.

Mishler, E. G. 1986. *Research Interviewing: Context and Narrative*. Cambridge: Harvard University Press.

Mobarg, M. 1997. Acquiring, teaching and testing vocabulary. *International Journal of Applied Linguistics* 7/2: 201-221.

Mohan, B., and Smith, S. M. 1992. Context and cooperation in academic tasks. In Nunan, D. (Ed.) *Collaborative Language Learning and Teaching*. Cambridge: Cambridge University Press, pp. 81-99.

Mondria, J. A. and Wit-de-Boer, M. 1991. The effects of contextual richness on the guessability and retention of words in a foreign language. *Applied Linguistics* 12/3: 249-267.

Moon, R. 1992. Textual aspects of fixed expressions in learners' dictionaries. In Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan, pp. 13-27.

Moon, R. 1997. Vocabulary connections: multi-word items in English. In Schmitt, N. and McCarthy, M. (Eds.) *Vocabulary: Description, Acquisition, and Pedagogy*. Cambridge: Cambridge University Press, pp. 40-63.

Moore, C. (Ed.) 1967. *The Chinese Mind: Essentials of Chinese Philosophy and Culture*. Homolulu: University of Hawaii Press.

Morgan, J. and Rinvolucri, M. 1986. *Vocabulary*. Oxford: Oxford University Press.

Morrison, L. 1996. Talking about words: a study of French as a second language learners' lexical inferencing procedures. *The Canadian Modern Language Review* 53/1: 41-75.

Moss, H. and Older, L. 1996. *Birkbeck Word Association Norms*. East Sussex: Psychology Press.

Murphy, B. 1996. Computer corpora and vocabulary study. *Language Learning Journal* 14: 53-57.

Myers, D. 1996a. Strategic waiting in China: an ethnosemantic approach. *Journal of Asian Pacific Communication* 7/3 & 4: 91-105.

Myers, D. 1996b. Studying words that teach culture. *IRAL* 34/3: 199-214.

Naiman, N., Fröhlich, M., Stern, H. H. and Todesco, A. 1996. *The Good Language Learner*. Clevedon: Multilingual Matters.

Nation, I. S. P. 1975. Teaching vocabulary in difficult circumstances. *ELT Journal* 30/1: 21-24.

Nation, I. S. P. 1982. Beginning to learn foreign vocabulary: a review of the research. *RELC Journal* 13: 14-36.

Nation, I. S. P. 1990. *Teaching and Learning Vocabulary*. New York: Newbury House.

Nation, P. 1993a. Using dictionaries to estimate vocabulary size: essential, but rarely followed, procedures. *Language Testing* 10/1: 27-40.

Nation, P. 1993b. Measuring readiness for simplified material: a test of the first 1,000 words of English. In Tickoo, M. L. (Ed.) *Simplification, Theory and Application*. Singapore: SEAMEO Regional Language Centre, pp. 193-203.

Nation, I. S. P. 1997. Bring today's vocabulary research into tomorrow's classrooms. In Jacobs, G. M. (Ed.) *Language Classrooms of Tomorrow: Issues and Responses*. Singapore: SEAMEO Regional Language Centre, pp. 170-182.

Nation, P. and Coady, J. 1988. Vocabulary and reading. In Carter, R. and McCarthy, M. (Eds.) *Vocabulary and Language Teaching*. London: Longman, pp. 97-110.

Nation, P. and Hwang, K. 1995. Where would general service vocabulary stop and special purposes vocabulary begin? *System* 23/1: 35-41.

Nation, P. and Waring, R. 1997. Vocabulary size, text coverage and word lists. In Schmitt, N. and McCarthy, M. (Eds.) *Vocabulary: Description, Acquisition and Pedagogy*. Cambridge: Cambridge University Press, pp. 6-19.

Nattinger, J. 1988. Some current trends in vocabulary teaching. In Carter, R. and McCarthy, M. (Eds.) *Vocabulary and Language Teaching*. London: Longman, pp. 62-82.

Nattinger, J. and DeCarrico, J. 1992. *Lexical Phrases and Language Teaching*. Oxford: Oxford University Press.

Nelson, G. L. 1995. Cultural differences in learning styles. In Reid, J. (Ed.) *Learning Styles in the ESL EFL Classroom*. Boston: Heinle & Heinle, pp. 3-18.

Newmark, P. 1991. *About Translation*. Clevedon: Multilingual Matters.

Newmark, P. 1996. Looking at English words in translation. In Anderman, G. M. and Roger, M. A. (Eds.) *Words, Words, Words*. Clevedon: Multilingual Matters, pp. 56-62.

Newton, J. 1995. Task-based interaction and incidental vocabulary learning: a case study. *Second Language Research* 11/2: 159-177.

Noel, M. and Davis, V. 1999. *Communiquez!* London: Hodder and Stoughton.

Norman, J. 1988. *Chinese*. Cambridge: Cambridge University Press.

Norušis, M. J. 1993. *SPSS for Windows: Base System User's Guide, Release 6.0*. Chicago: SPSS Inc.

Nunan, D. 1988. *The Learner-Centred Curriculum: A Study in Second Language Teaching*. Cambridge: Cambridge University Press.

Nunan, D. 1989. *Designing Tasks for the Communicative Classroom*. Cambridge: Cambridge University Press.

Nunan, D. 1991. *Language Teaching Methodology: A Textbook for Teachers*. New York: Prentice Hall.

Nunan, D. (Ed.) 1992a. *Collaborative Language Learning and Teaching*. Cambridge: Cambridge University Press.

Nunan, D. 1992b. *Research Methods in Language Learning*. Cambridge: Cambridge University Press.

Nunan, D. 1993. From learning-centeredness to learner-centeredness. *Applied Language Learning* 4/1&2: 1-18.

Nunan, D. 1995a. Closing the gap between learning and instruction. *TESOL Quarterly* 29/1: 133-158.

Nunan, D. 1995b. *ATLAS: Learning-Centered Communication*. Boston, MA: Heinle & Heinle.

Nunan, D. 1997. Strategy training in the language classroom: an empirical investigation. *RELC Journal* 28/2: 56-81.

Nunan, D, and Lamb, C. 1996. *The Self-directed Teacher: Managing the Learning Process*. Cambridge: Cambridge University Press.

Odlin, T. 1989. *Language Transfer*. Cambridge: Cambridge University Press.

O'Malley, J. M. 1987. The effects of training in the use of learning strategies on acquiring English as a second language. In Wenden, A. L. and Rubin, J. (Eds.) 1987. *Learner Strategies in Language Learning*. Englewood Cliffs, NJ: Prentice Hall, pp. 133-144.

O'Malley, J. M. and Chamot, A. U. 1990. *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge University Press.

Ooi, D. and Kim-Seoh, J. 1996. Vocabulary teaching: looking behind the word. *ELT Journal* 50/1: 52-58.

Osgood, C. E, Suci, G. J. and Tennenbaum, P. H. 1957. *The Measurement of Meaning*. Urbana: The University of Illinois Press.

Ostyn, P. and Godin, P. 1985. RALEX: an alternative approach to language teaching. *The Modern Language Journal* 69/4: 346-355.

Oxford, R. L. 1989. Use of language learning strategies: a synthesis of studies with implications for strategy training. *System* 17/2: 235-247.

Oxford, R. L. 1990. *Language Learning Strategies: What Every Teacher Should Know*. Boston: Newbury House.

Oxford, R. L. 1993. Research on second language learning strategies. *Annual Review of Applied Linguistics* 13: 175-187.

Oxford, R. L. (Ed.) 1996a. *Language Learning Strategies around the World: Cross-cultural Perspectives*. Honolulu: Second Language Teaching and Curriculum Center, Univeristy of Hawai'i.

Oxford, R. L. 1996b. Employing a questionnaire to assess the use of language learning strategies. *Applied Language Learning* 7: 25-45.

Oxford, R. L. and Anderson, N. J. 1995. A crosscultural view of learning style. *Language Teaching* 28: 201-215.

Oxford, R. L. and Crookall, D. 1989. Research on language learning strategies: methods, findings, and instructional issues. *The Modern Language Journal* 73/4: 404-419.

Oxford, R. L. and Crookall, D. 1990. Vocabulary learning: a critical analysis of techniques. *TESL Canada Journal* 7/2: 9-30.

Oxford, R. L., Hollaway, M. E., and Horton-Murillo, D. 1992. Language learning styles: research and practical considerations for teaching in the multicultural tertiary ESL/EFL classroom. *System* 20/4: 439-456.

Oxford, R., Lavine, R. and Crookall, D. 1989. Language learning strategies, the communicative approach and their classroom implications. *Foreign Language Annals* 22/1: 29-39.

Oxford, R. L. and Scarcella, R. C. 1994. Second language vocabulary learning among adults: state of the art in vocabulary instruction. *System* 22/2: 231-243.

Palmberg, R. 1987a. Vocabulary development in foreign-language learners. *Studies in Second Language Acquisition (Special issue: The Use and Acquisition of the Second Language Lexicon)* 9/2: 201-219.

Palmberg, R. 1987b. On lexical inferencing and the young foreign-language learner. *System* 15/1: 69-76.

Palmberg, R. 1990. Improving foreign-language learners' vocabulary skills. *RELC Journal* 21/1: 1-11.

Parry, K. 1991. Building a vocabulary through academic reading. *TESOL Quarterly* 25/4: 629-653.

Parry, K. (Ed.) 1998. *Culture, Literacy, and Learning English: Voices from the Chinese Classroom*. Portsmouth, NH: Boyton/Cook Publishers.

Pause-Chang, G. 1991. Foreign language learning in Taiwan: ways to overcome common difficulties for Chinese students in learning German. In Fendos, P. G. *Cross-cultural Communication: East and West (Volume III)*. Taiwan: T'ai Ch'eng Publishing, pp. 723-739.

Pearson, E. 1988. Learner strategies and learner interviews. *ELT Journal* 42/3: 173-178.

Penaflorida, A. H. 1998. Non-traditional forms of assessment and response to student writing: a step towards learner autonomy. In Renandya, W. A. and Jacobs, G. M. (Eds.) *Learners and Language Learning*. Singapore: SEAMEO Regional Language Centre, pp. 72-88.

Pickard, N. 1995. Out-of-class language learning strategies: three case studies. *Language learning Journal* 12: 35-37.

Pickard, N. 1996. Out-of-class language learning strategies. *ELT Journal* 50/2: 150-159.

Pincas, A. 1996. Memory and foreign language learning. *MET* 5/4: 9-17.

Ping, H. 1995. Chinese attitudes towards learning and reading. In Chapman, M. and Anderson, J. (Eds.) *Thinking Globally about Language Education*. Vancouver, B.C.: Center for the Study of Curriculum and Instruction, University of British Columbia, pp. 35-48.

Politzer, R. L. and McGroarty, M. 1985. An exploratory study of learning behaviors and their relationship to gains in linguistic and communicative competence. *TESOL Quarterly* 19/1: 103-123.

Porte, G. 1988. Poor language learners and their strategies for dealing with new vocabulary. *ELT Journal* 42/3: 167-172.

Qian, D. 1996. ESL vocabulary acquisition: contextualization and decontextualization. *The Canadian Modern Language Review* 53/1: 120-142.

Ramsey, S. R. 1987. *The Language of China*. New Jersey: Princeton University Press.

Ravindran, R. 1998. En route to learner independence via learning conversation and language counselling. In Renandya, W. A. and Jacobs, G. M. (Eds.) *Learners and Language Learning*. Singapore: SEAMEO Regional Language Centre, pp. 56-71.

Read, J. 1993. The development of a new measure of L2 vocabulary knowledge. *Language Testing* 10/3: 355-371.

Read, J. 2000. *Assessing Vocabulary*. Cambridge: Cambridge University Press.

Redding, G. and Wong, G. Y. Y. 1986. The psychology of Chinese organizational behaviour. In Bond, M. H. (Ed.) 1986. *The Psychology of the Chinese People*. Oxford: Oxford University Press, pp. 267-295.

Redman, S. and Ellis, R. 1989. *A Way with Words* (Book 1). Cambridge: Cambridge University Press.

Rees-Miller, J. 1993. A critical appraisal of learner training: theoretical bases and teaching implications. *TESOL Quarterly* 27/4: 679-689.

Reid, E. 1990. Culture and language teaching: ESL in England. In Harrison, B. (Ed.) *Culture and the Language Classroom*. London: Modern English Publications/British Council, pp. 66-75.

Reid, J. 1987. The learning style preferences of ESL students. *TESOL Quarterly* 21/1: 87-111.

Reid, J. (Ed.) 1995. *Learning Styles in the ESL EFL Classroom*. Boston: Heinle & Heinle.

Renandya, W. A. and Jacobs, G. M. (Eds.) 1998. *Learners and Language Learning*. Singapore: SEAMEO Regional Language Centre.

Reynolds, D. 1996. A core belief that all can succeed. *TES*, 6th December, p. 16.

Richards, J. C. (Ed.) 1974a. *Error Analysis: Perceptives on Second Language Acquisition*. London: Longman.

Richards, J. C. 1974b. Word lists: problems and prospects. *RELC Journal* 5/2: 69-84.

Richards, J. 1976. The role of vocabulary teaching. *TESOL Quarterly* 10: 77-89.

Robinson, P. J. 1989. A rich view of lexical competence. *ELT Journal* 43/4: 274-282.

Robson, C. 1993. *Real World Research: a Resource for Social Scientists and Practitioner-Researchers*. Oxford: Blackwell.

Rossi-Le, L. 1995. Learning styles and strategies in adult immigrant ESL students. In Reid, J. (Ed.) *Learning Styles in the ESL EFL Classroom*. Boston: Heinle and Heinle, pp. 118-126.

Rough, M. R. and Atkinson, R. C. 1975. A mnemonic method for learning a second-language vocabulary. *Journal of Educational Psychology* 67: 1-16.

Rubin, J. 1975. What the "good language learner" can teach us. *TESOL Quarterly* 9: 41-51.

Rubin, J. and Thompson, I. 1994. *How to be a more Successful Language Learner: toward Learner Autonomy* (2nd Ed.). Boston, MA: Heinle & Heinle.

Sampson, G. 1987. *Writing Systems*. London: Hutchinson Education.

Sanaoui, R. 1995. Adult learners' approaches to learning vocabulary in second languages. *The Modern Language Journal* 79/1: 15-28.

Sanaoui, R. 1996. Processes of vocabulary instruction in 10 French as a second language classrooms. *The Canadian Modern Language Review* 52/2: 178-199.

Scarcella, R. 1990. *Teaching Language Minority Students in the Multicultural Classroom*. New Jersey: Prentice-Hall.

Scarcella, R. and Oxford, R. 1992. *The Tapestry of Language Learning: the Individual in the Communicative Classroom*. Boston, MA: Heinle & Heinle.

Schmidt, R. W. 1990. The role of consciousness in second language learning. *Applied Linguistics* 11/2: 128-158.

Schmitt, N. 1995. A fresh approach to vocabulary: using a word knowledge framework. *RELC Journal* 26/1: 86-94.

Schmitt, N. 1997. Vocabulary learning strategies. In Schmitt, N. and McCarthy, M. (Eds.) *Vocabulary: Description, Acquisition and Pedagogy*. Cambridge: Cambridge University Press, pp. 199-227.

Schmitt, N. 1998a. Tracking the incremental acquisition of second language vocabulary: a longitudinal study. *Language Learning* 48:2: 281-317.

Schmitt, N. 1998b. Measuring collocational knowledge: key issues and an experimental assessment procedure. *ITL Review of Applied Linguistics* 119-120:.27-47

Schmitt, N. 1999. The relationship between TOEFL vocabulary items and meaning, association, collocation and word-class knowledge. *Language Testing* 16/2: 189-216.

Schmitt, N. 2000. *Vocabulary in Language Teaching*. Cambridge: Cambridge University Press.

Schmitt, N. and McCarthy, M. (Eds.) 1997. *Vocabulary: Description, Acquisition and Pedagogy*. Cambridge: Cambridge University Press.

Schmitt, N. and Meara, P. 1997. Researching vocabulary through a word knowledge framework: word associations and verbal suffixes. *Studies in Second Language Acquisition* 19: 17-36.

Schmitt, N. and Schmitt, D. 1995. Vocabulary notebooks: theoretical underpinnings and practical suggestions. *ELT Journal* 49/2: 133-143.

Schouten-van Parreren, C. 1989. Vocabulary learning through reading: which conditions should be met when presenting words in texts? *AILA review* 6: 75-84.

Schouten-van Parreren, C. 1992. Individual differences in vocabulary acquisition: a qualitative experiment in the first phase of secondary education. In Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan, pp. 94-101.

Scollon, R. 1999. Cultural codes for calls: the use of commercial television in teaching culture in the classroom. In Heinkel, E. (Ed.) *Culture in Second Language Teaching and Learning*. Cambridge: Cambridge University Press, pp. 181-195.

Scollon. S. 1999. Not to waste words or students: Confucian and Socratic discourse in the tertiary classroom. In Hinkel, E. (Ed.) 1999. *Culture in Second Language Teaching and Learning*. Cambridge: Cambridge University Press, pp. 13-27.

Scollon, R. and Scollon, S. W. 1995. *Intercultural Communication: A Discourse Approach*. Oxford: Blackwell.

Scott, M. 1997. PC analysis of key words – and key key words. *System* 25/2: 233-245.

Scurfield, E. 1991. *Teach Yourself Books: Chinese*. London: Hodder Headline.

Seal, B. D. 1991. Vocabulary learning and teaching. In Celce-Murcia, M. (Ed.) *Teaching English as a Second or Foreign Language* (2nd Ed.). Boston, MA: Heinle & Heinle, pp. 296-311.

Seidman, I. E. 1991. *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*. New York: Teachers College Press.

Seliger, H. W. and Shohamy, E. 1989. *Second Language Research Methods*. Oxford: Oxford University Press.

Seligman, S. D. 1990. *Dealing with the Chinese: A practical Guide to Business Etiquette*. London: Mercury.

Selinker, L. 1992. *Rediscovering Interlanguage*. London: Longman.

Shen, W. W. and Cortazzi, M. 2000. Cross-linguistic awareness of key cultural lexis: a study of Chinese and English. *5th International Conference AIA*, University of Leicester.

Shi, C. 1987. *Best Books for Chinese Children: A Chinese Primer (1000 Characters)*. Taipei: Confucius Press.

Sinclair, J. and Renouf, A. 1988, A lexical syllabus for language learning. In Carter, R. and McCarthy, M. (Eds.) *Vocabulary and Language Teaching*. London: Longman, pp. 140-160.

Singleton, D. 1997. Learning and processing L2 vocabulary. *Language Teaching* 30: 213-225.

Singleton, D. 1999. *Exploring the Second Language Mental Lexicon*. Cambridge: Cambridge University Press.

Singleton, J. 1991. The spirit of *Gambaru*. In Finkelstein, A., Imamura, A. and Tobin, J. (Eds.) *Transcending Stereotypes: Discovering Japanese Culture and Education*. Yarmouth, ME: Intercultural Press, pp. 119-125.

Skehan, P. 1989. *Individual Differences in Second-Language Learning*. London: Edward Arnold.

Smith, D. H. 1985. *Confucius and Confucianism*. London: Paladin.

Smith, K. J. 1997. Cross-cultural schemata and change in modern China: 'First fresh air comes in and also flies come in'. *Language and Education* 11/4: 260-270.

Smith, R. J. 1983. *China's Cultural Heritage: The Ch'ing Dynasty, 1644-1912*. London: Francis Pinter Publishers.

Sokmen, A. J. 1997. Current trends in teaching second language vocabulary. In Schmitt, N. and McCarthy, M. (Eds.) *Vocabulary: Description, Acquisition and Pedagogy*. Cambridge: Cambridge University Press, pp. 237-257.

Stahl, S. A. 1986. Three principles of effective vocabulary instruction. *Journal of Reading Behavior* 29/7: 662-668.

Stebbins, C. 1995. Culture-specific perceptual-learning-style. In Reid, J. (Ed.) *Learning Styles in the ESL EFL Classroom*. Boston: Heinle & Heinle, pp. 108-117.

Stern, H. H. 1975. What can we learn from the good language learner? *Canadian Modern Language Review* 31: 304-318.

Sternberg, R. 1987. Most vocabulary is learned from context. In McKeown, M., and Curtis, M. (Eds.) *The Nature of Vocabulary Acquisition*. Hillsdale, NJ.: Lawrence Erlbaum, pp. 89-106.

Sternberg, R. J. 1995. Styles of thinking and learning. *Language Testing* 12/3: 265-291.

Stevick, E. 1982. *Teaching and Learning Languages*. Cambridge: Cambridge University Press.

Strauss, A. and Corbin, J. 1990. Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park: Sage.

Su. S. H. (Ed.) 1990. *Active Study Chinese-English Dictionary*. Taipei: Lanbridge Press.

Suh, K. 1991. Review of vocabulary and language teaching: Applied linguistics and language study series. *TESOL Quarterly*: 715-717.

Summers, D. 1988. The role of dictionaries in language learning. In Carter, R. and McCarthy, M. (Eds.) 1988. *Vocabulary and Language Teaching*. London: Longman, pp. 111-125.

Swan, M. 1997. The influence of the mother tongue on second language vocabulary acquisition and use. In Schmitt, N. and McCarthy, M. (Eds.) *Vocabulary: Description, Acquisition, and Pedagogy*. Cambridge: Cambridge University Press, pp. 156-180.

Swan, M. and Walter, C. 1985. *The Cambridge English Course*. Cambridge: Cambridge University Press.

Szalay, L. B., Strohl, J. B., Liu, F., and Lao, P. S. 1994. *American and Chinese Perceptions and Belief Systems: A People's Republic of China – Taiwanese Comparison*. New York: Plenum Press.

Taft, 1991. *Reading and the Mental Lexicon*. Hove, East Sussex: Lawrence Erlbaum.

Talamas, A., Kroll, J., and Dufour, R. 1999. From form to meaning: stages in the acquisition of second-language vocabulary. *Bilingualism: Language and Cognition* 2/1: 45-58.

Tang, S. 1986. The linguistic concepts of difficulties and the teaching of English vocabulary (at college level). In Tang, C., Huang, B., and Liou, C. (Eds.) *The 3rd Conference on English Teaching and Learning in the Republic of China*. Taipei: The Crane, pp. 197-239.

Tapia, A. 1996. Two ideas for vocabulary revision. *MET* 5/2: 42-43.

Taylor, G. and Edwards, D. 1992. *Etoliles 1*. London: BBC Enterprises/Longman.

Taylor, J. R. 1989. *Linguistic Categorization: Prototypes in Linguistic Theory*. Oxford: Clarendon Press.

Taylor, L. 1990. *Teaching and Learning Vocabulary*. Hertfordshire: Prentice Hall.

Tesch, R. 1990. *Qualitative Research: Analysis Types and Software Tools*. London: The Falmer Press.

Tharp, R. and Gallimore, R. 1988. Rousing Minds to Life. New York: Cambridge University Press.

The Economist. 21st January 1995. Confucianism: new fashion for old wisdom, pp. 72-73.

Thorne, C. and Thorne, A. 1992. Vocabulary learning and memorisation. Helping learners to help themselves - a role for the teacher. *Teaching English in China, ELT Newsletter* 24: 38-42.

Thompson, G. 1987a. Using bilingual dictionaries. *ELT Journal* 41/4: 282-286.

Thompson, I. 1987b. Memory in language learning. In Wenden, A. and Rubin, J. (Eds.) *Learner Strategies in Language Learning*. Cambridge: Prentice Hall, pp. 43-56.

Tinkham, T. 1993. The effect of semantic clustering on the learning of second language vocabulary. *System* 21/3: 371-380.

Tsai, W. L. 1997. *Learning beyond the classroom: a Critical Analysis of Voluntary Reading among University Students*. Unpublished PhD thesis, University of Leicester, UK.

Tsui, A. B. M. 1996. Reticence and anxiety in second language learning. In Bailey, K. M. and Nunan, D. (Eds.) *Voices from the Language Classroom*. Cambridge: Cambridge University Press, pp. 145-167.

Tudor, I. 1996. *Learner-centredness as Language Education*. Cambridge: Cambridge University Press.

Urquhart, S. and Wier, C. 1998. *Reading in a Second Language, Process, Product and Practice*. London: Longman.

Van Parreren, C. F. and Schouten-Van Parreren, M. C. 1981. Contextual guessing: a trainable reader strategy. *System* 9/3: 235-241.

Vann, R. J. and Abraham, R. G. 1990. Strategies of unsuccessful learners. *TESOL Quarterly* 24: 177-198.

Verhallen, M. and Schoonen, R. 1993. Lexical knowledge of monolingual and bilingual children. *Applied Linguistics* 14/4: 344-363.

Verhallen, M. and Schoonen, R. 1998. Lexical knowledge in L1 and L2 of third and fifth graders. *Applied Linguistics* 19/4: 452-470.

Verstraten, L. 1992. Fixed phrases in monolingual learners' dictionaries. In Arnaud, P. J. L. and Béjoint, H. (Eds.) *Vocabulary and Applied Linguistics*. Basingstoke, Hants: Macmillan, pp. 28-40.

Visser, A. 1990. Learning vocabulary through underlying meanings: an investigation of an interactive technique. *RELC Journal* 21/1: 11-28.

Vives, G. and Meara, P. 1994. Word associations in Spanish. *Vida Hispanica* 10: 12-22.

Waley, A. 1988. *The Analects of Confucius*. London: Unwin Hyman.

Wallace, M. 1982. *Teaching Vocabulary*. London: Heinemann Educational Books.

Wang, A. Y. and Thomas, M. H. 1995. The effects of imagery-based mnemonics on the long-term retention of Chinese characters. In Harley, B. (Ed.) *Lexical Issues in Language Learning*. Amsterdam: John Benjamins, pp. 167-183.

Waring, R. 1997. The negative effects of learning words in semantic sets: a replication. *System* 25/2: 261-274.

Wei, J. 1995. *Basic Chinese*. Taipei, Taiwan: Wanren.

Wenden, A. L. 1986a. Helping language learners think about learning. *ELT Journal* 40/1: 3-11.

Wenden, A. L. 1986b. What do second-language learners know about their language learning? A second look at retrospective accounts. *Applied Linguistics* 7/2: 186-201.

Wenden, A. 1987. How to be a successful language learner: insights and prescriptions from L2 learners. In Wenden, A. and Rubin, J. (Eds.) *Learner Strategies in Language Learning*. Cambridge: Prentice Hall, pp. 103-118.

Wenden, A. and Rubin, J. (Eds.) 1987. *Learner Strategies in Language Learning*. Cambridge: Prentice Hall.

West, M. 1953. *A General Service List of English Words*. London: Longman.

White, C. J. 1989. Negotiating communicative language teaching in a traditional setting. *ELT Journal* 43/3: 213-230.

Widdowson, H. G. 1990. *Aspects of Language Teaching*. Oxford: Oxford University Press.

Wierzbicka, A. 1985. A semantic metalanguage for a crosscultural comparison of speech acts and speech genres. *Language in Society* 14: 491-514.

Wierzbicka, A. 1991. Japanese key words and core cultural values. *Language in Society* 20: 333-385.

Wierzbicka, A. 1992a. *Semantics, Culture, and Cognition: Universal Human Concepts in Culture-Specific Configurations*. New York: Oxford University Press.

Wierzbicka, A. 1992b. The search for universal semantic primitives. In Dirven, R. and Pütz, M. (Eds.) *Thirty Years of Linguistic Evolution*. Philadelphia: John Benjamins, pp. 215-242.

Wierzbicka, A. 1996. Contrastive socialinguistics and the theory of "cultural scripts": Chinese vs English. In Hellinger, M. and Ulrich, A. (Eds.) Constrastive Socialinguistics. Berlin: Mouton de Gruyter, pp. 313-344.

Wierzbicka, A. 1997. Understanding Cultures through Their Key Words: English, Russian, Polish, German, and Japanese. Oxford: Oxford University Press.

Wilkins, D. A. 1972. *Linguistics in Language Teaching*. London: Edward Arnold.

Wilkins, D. A. 1974. *Second-Language Learning and Teaching*. London: Edward Arnold.

Willing, K. 1988. *Learning Styles in Adult Migrant Education*. Adelaide, Australia: Curriculum Resource Centre.

Willing, K. 1989. *Teaching How to Learn. Learning Strategies in ESL*. Sydney, Australia: National Centre for English Language Teaching and Research, Marquarie University.

Willis, D. 1990. *The Lexical Syllabus*. London: Collins Cobuild.

Willis, J. and Willis, D. 1988. *Collins COBUILD English Course*. London: Collins ELT.

Wingert, P. and Greenberg, S. 1996. At the top of the class: a worldwide math-and-science study shows that Asian kids outrank their peers in America and Western Europe. Are there lessons to be learned? *Newsweek*, 2nd December: 54.

Wolcott, H. F. 1994. *Transforming Qualitative Data: Description, Analysis, and Interpretation*. Thousand Oaks: SAGE Publications.

Wong, S. C. 1988. What we do and don't know about Chinese learners of English: a critical review of selected research. *RELC Journal* 19/1: 1-20.

Worthington, D. and Nation, P. 1996. Using texts to sequence the introduction of new vocabulary in an EAP course. *RELC Journal* 27/2: 1-11.

Wu, J. 1985. *The Pinyin Chinese-English Dictionary*. Beijin: The Commercial Press.

Xu, C. (Ed.) 1990. *The Three Character Classic in Picture*. Singapore: EPB Publishing.

Xu, H. (Eds.) 1994. *San Zi Jing*. Beijing: Huaxia.

Xue, G. Y. and Nation, P. 1984. A university list. *Language Learning and Communication* 3/2: 215-229.

Yang, N. D. 1994. Beliefs about language learning and learning strategy use: a study of college students of English in Taiwan. In Li, L. W. P., Yin, Y. M., Chang, A. H., Lin, A. I. and Lin, C. Y. (Eds.) *Papers from the 10th Conference on English Teaching and Learning in the Republic of China*. Taipei: The Crane, pp. 193-219.

Yang, S. 1998. An interpretation of cultural translation. *The Linguist* 37/4: 112-116.

Young, L. W. 1994. *Crosstalk and Culture in Sino-American Communication*. Cambridge: Cambridge University Press.

Young, R. 1987. The cultural context of TESOL - a review of research into Chinese classrooms. *RELC Journal* 18/2: 15-30.

Yu, H. 1992. Teaching vocabulary: a discussion. *Teaching English in China, ELT Newsletter* 24: 43-45.

Yuan, B. 1994. Second language acquisition of reflexives revised. *Language* 70/3: 539-545.

Yuan, B. 1995. Acquisition of base-generated topics by English-speaking learners of Chinese. *Language Learning* 45/4: 567-603.

Yuan, B. 1996. How are lexical-semantic differences represented in L2 syntax? A study of the unaccusative/unergative distinction in L2 Chinese. *EUROSLA* 6: 201-215.

Yue, C. 1991. An alternative to rote - learning in teaching vocabulary. *Teaching English in China, ELT Newsletter* 23: 60-63.

Zechmeister, E. B., D'Anna, C. A., Hall, J. W, Paus, C. H., and Smith, J. A. 1993. Metacognitive and other knowledge about the mental lexicon: do we know how many words we know? *Applied Linguistics* 14/2: 188-206.

Zhang, J. 1998. Improvement in classroom teaching of English. In Parry, K. (Ed.) 1998. *Culture, Literacy, and Learning English: Voices from the Chinese Classroom*. Portsmouth, NH: Boyton/Cook Publishers, pp. 212-215.

Zhu, Y. (*et al.*) 1986. *Concise English-Chinese Chinese-English Dictionary*. Hong Kong: Oxford University Press.

Zimmerman, C. B. 1997. Do reading and interactive vocabulary instruction make a difference? An empirical study. *TESOL Quarterly* 31/1: 121-140.

Appendix A: The initials and finals of MPS and Pinyin

Initials		Finals			
MPS	Pinyin	MPS	Pinyin	MPS	Pinyin
ㄅ	b	ㄚ	a	ㄧㄚ	ya,-ia
ㄆ	p	ㄛ	o	ㄧㄛ	yo
ㄇ	m	ㄜ	e	ㄧㄝ	ye,-ie
ㄈ	f	ㄝ	ê	ㄧㄞ	
ㄉ	d	ㄞ	ai	ㄧㄠ	yao, -iao
ㄊ	t	ㄟ	ei	ㄧㄡ	you, -iu
ㄋ	n	ㄠ	ao	ㄧㄢ	yan, -ian
ㄌ	l	ㄡ	ou	ㄧㄣ	yin,-in
ㄍ	g	ㄢ	an	ㄧㄤ	yang, -iang
ㄎ	k	ㄣ	en	ㄧㄥ	ying, -ing
ㄏ	h	ㄤ	ang	ㄨㄚ	wa, -ua
ㄐ	j	ㄥ	eng	ㄨㄛ	wo, -uo
ㄑ	q	ㄦ	er	ㄨㄞ	wai, -uai
ㄒ	x	ㄧ	yi,-i	ㄨㄟ	wei, -ui
ㄓ	zh(i)	ㄨ	wu,-u	ㄨㄢ	wan, -uan
ㄔ	ch(i)	ㄩ	yu,-u/ü	ㄨㄣ	wen, -un
ㄕ	sh(i)			ㄨㄤ	wang, -uang
ㄖ	r(i)			ㄨㄥ	weng, -ong
ㄗ	z(i)			ㄩㄝ	yue, - üe
ㄘ	c(i)			ㄩㄢ	yuan, -üan
ㄙ	s(i)			ㄩㄣ	yun, -ün
				ㄩㄥ	yong, -iong

(Source: *National Audio-Visual Chinese (Vol.1). 1997. Taipei: Mandarin Training Centre, National Taiwan Normal University*, p. i.)

Appendix B: Phase I Questionnaires (Questionnaire A1)

This questionnaire[1] is about your experience of learning English vocabulary. Please tick each item in the tables on both sides. First, please do give brief information about yourself below.

ABOUT YOURSELF

Sex: ☐ Male ☐ Female

Age: ☐ 11-15 ☐ 16-19 ☐ 20-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ 41-50 ☐ 51+

Which language(s) do you use at home? _____

Do you use English to communicate with other people in your daily life outside the classroom? ☐ Yes ☐ No

What is your major field of study in this university? _____

Years of Learning English: ☐ Under 3 ☐ 4-6 ☐ 7-10 ☐ 11-13 ☐ 14-16 ☐ 17+

Have you studied or are you studying any other foreign language? If so, please write *which* **language,** *when* **and** *for how long*?

In this questionnaire, ***frequency of use*** *means how often you use each method;* ***efficiency of use*** *means how useful you think each method is, or might be. (N. B. Please tick* ***unsure****, if, after careful thought, you* ***cannot*** *decide about 'efficiency of use'.)*

When studying English vocabulary, I ...		Frequency of Use					Efficiency of Use				
		never	rarely	some-times	often	always	useless	not so good	good	very good	un-sure
read English	1. newspapers/magazines										
	2. textbooks										
	3. literature										
	4. non-fiction										
listen to	5. audio cassettes										
	6. radio programmes										
	7. native English speakers										
	8. other learners										
	9. teachers of English										
speak to	10. native English speakers										
	11. teachers of English										
	12. other learners										
write	13. essays, compositions										
	14. taking notes										
watch/ read English	15. films/video cassettes										
	16. TV programmes										
	17. cartoons/comics										
	18. vocabulary cards										
memorise	19. words in dictionaries										
	20. words in vocabulary books										
	21. words in categories										
use	22. translating/interpreting										
	23. word formation										
	24. vocabulary games										

1. Are there other methods you often use (apart from this table)?

_____

2. Which methods were recommended by your teachers? (Give numbers and/or add other terms)

_____

3. Which of the above methods do you think is the *most* important? (give the number)

_____

4. Which of the above methods do you prefer to use *most* all the time? (choose the numbers)

_____

Please turn over and continue. Thank you.

[1] Questionnaire A1 (Chinese learners of English); Questionnaire A2 (British learners of Mandarin); Questionnaire A3 (British learners of French).

Appendix B (Continued): Phase I Questionnaires (Questionnaire A1)

When studying English vocabulary, I ...		Frequency of Use					Efficiency of Use				
		never	rarely	some-times	often	always	useless	not so good	good	very good	un-sure
get information through	25. my classmates										
	26. guessing from the context										
	27. the teacher										
	28. English paraphrase										
	29. Chinese equivalent										
	30. examples of use										
	31. paying no particular attention										
use a dictionary	32. a monolingual dictionary										
	33. a bilingual dictionary										
	34. to look up the meaning										
	35. to look up the derivation										
	36. to look up grammatical information										
	37. to check pronunciation										
	38. for examples of use										
memorise/ practise through	39. creating a mental image of the word										
	40. associating it with other keywords										
	41. associating it with a Chinese word with a similar sound										
	42. word analysis (root, prefix, suffix)										
	43. grouping with other English words of similar meanings										
	44. visualising spelling in my mind										
	45. dividing it into parts by meaning										
	46. linking it to the situation in which it appeared										
	47. using it in real situations or sentences										
	48. writing the word repeatedly										
	49. repeating the spelling aloud										
take notes	50. by ordering words as met										
	51. grouping words by meaning										
	52. for pronunciation										
	53. with Chinese equivalent										
	54. with English synonyms										
	55. with both Chinese equiv. and English synon.										
	56. for word formation/derivation										
	57. for grammatical information										
	58. with a phrase, sentence, or context										

1. Are there other methods you often use (apart from this table)?

_____

2. Which methods were recommended by your teachers? (give numbers and/or add other terms)

_____

3. Which of the above methods do you think is the *most* important? (give the number)

_____

4. Which of the above methods do you prefer to use *most* all the time? (choose three numbers)

_____

The end

(NB: Please do check if two sides of the tables have been completed.)

Thank you very much for your help!!

Appendix C: Reciprocal co-ordinate model of vocabulary teaching and learning

Contextual

1. read newspapers; 2. textbooks; 3. literature; 4. non-fiction; 5. listen to audio cassettes; 6. radio programmes; 7. native speakers; 8. other learners; 9. teachers; 10. speak to native; 11. teachers; 12. learners; 13. write essays; 15. watch films; 16. TV; 17. cartoons; 26. get information from guessing; 30. examples of use; 31. no attention; 38. use a dictionary for examples of use; 46. memorisation through situations; 47. real use; 58. note contexts

2C

2. read textbooks; 10. speak to native; 11. teachers; 12. learners; 13. write essays; 14. take notes; 18. watch vocabulary cards; 19. memorisation: in dictionaries; 20. vocabulary books; 21. in categories; 22. use translating; 23. word formation; 24. games; 25. get info. from classmates; 27. teachers; 28. L2 paraphrase; 29. L1 equivalents; 32. use a dictionary of monolingual type; 33. bilingual type; 34. look up meanings; 35. derivation; 36. grammar; 37. pronunciation; 38. use a dictionary for examples of use; 39. memorisation: mental image; 40. keyword association; 41. sound association; 42. word analysis; 43. meaning grouping; 44. visualising spelling; 45. divide the word by meanings; 46. memorisation: situations; 47. real use; 48. write repeatedly; 49. read repeatedly; 50. take notes by ordering words as met; 51. grouping by meanings; 52. pronunciation; 53. L1 equivalent; 54. L2 synonyms; 55. L1 & L2; 56. word formation; 57. grammar; 58. note contexts

Consolidating

Appendix C (Continued): Reciprocal co-ordinate model of vocabulary teaching and learning

5R	**Receiving**	1. read newspapers; 2. textbooks; 3. literature; 4. non-fiction; 5. listen to audio cassettes; 6. radio programmes; 7. native speakers; 8. other learners; 9. teachers; 10. speak to native; 11. teachers; 12. learners; 15. watch films; 16. TV; 17. cartoons; 22. translate; 25. get information from classmates; 27. teachers; 28. L2 paraphrase; 29. L1 equivalents; 30. examples of use; 31. no attention; 32.use a dictionary of monolingual type
	Recognising	1. read newspapers ; 3. literature; 4. non-fiction; 5.listen to audio cassettes; 6. radio programmes; 7. native speakers; 8. other learners; 9. teachers; 23. word formation; 26. guessing; 50. take notes by ordering words as met; 51. group by meanings; 52. pronunciation; 53. L1 equivalent; 54. L2 synonyms; 55. L1 & L2; 56. word formation; 57. grammar; 58. contexts
	Retaining	18. watch vocabulary cards; 19. memorisation: dictionaries; 20. vocabulary books; 21. in categories; 22. translating; 23. word formation; 24. games; 39. memorisation: mental image; 40. keyword association; 41. sound association; 42.word analysis; 43.meaning grouping; 44.visualising spelling; 45. divide the word by meanings; 48. write repeatedly; 49. read repeatedly
	Retrieving	10. speak to native; 11. teachers; 12. learners; 13.write essays; 14. take notes; 22. translate; 23. word formation; 24. games
	Recycling	1. read newspapers ; 3. literature; 4. non-fiction; 5. listen to audio cassettes; 6. radio programmes; 7. native speakers; 8. other learners; 9. teachers; 10. speak to native; 11. teachers; 12. learners; 13. write essays; 14. taking notes; 15. watch films; 16.TV; 17. cartoons

Appendix D: The descending mean scores of frequency in the use of vocabulary learning strategies for the three groups

	CE	Mean	BM	Mean	BF	Mean
(1)	34 to look up the meaning	3.72	9 teachers of L1	4.36	33 a bilingual dictionary	4.33
(2)	2 textbooks	3.68	2 textbooks	4.35	34 to look up the meaning	4.26
(3)	38 for examples of use	3.41	11 teachers of L2	4.15	9 teachers of L1	3.82
(4)	37 to check pronunciation	3.40	20 words in vocabulary books	4.14	27 the teacher	3.81
(5)	16 TV programmes	3.35	27 the teacher	4.11	14 taking notes	3.79
(6)	27 the teacher	3.35	58 with a phrase, sentence, or context	3.99	53 with L1 equivalent	3.70
(7)	40 associating it with other keywords	3.32	14 taking notes	3.95	58 with a phrase, sentence, or context	3.54
(8)	9 teachers of L1	3.32	30 examples of use	3.91	38 for examples of use	3.53
(9)	15 films/video cassettes	3.31	48 writing the word repeatedly	3.88	47 using it in real situations or sentences	3.52
(10)	33 a bilingual dictionary	3.30	53 with L1 equivalent	3.81	22 translating/interpreting	3.52
(11)	30 examples of use	3.29	22 translating/interpreting	3.75	11 teachers of L2	3.51
(12)	44 visualising spelling in my mind	3.27	57 for grammatical information	3.62	2 textbooks	3.44
(13)	48 writing the word repeatedly	3.27	5 audio cassettes	3.59	30 examples of use	3.42
(14)	36 to look up grammatical information	3.23	7 native L2 speakers	3.58	13 essays, compositions	3.32
(15)	29 L1 equivalent	3.20	34 to look up the meaning	3.58	57 for grammatical information	3.32
(16)	53 with L1 equivalent	3.19	8 other learners	3.54	46 linking it to the situation in which it appeared	3.31
(17)	35 to look up the derivation	3.17	47 using it in real situations or sentences	3.49	29 L1 equivalent	3.26
(18)	49 repeating the spelling aloud	3.16	29 L1 equivalent	3.47	36 to look up grammatical information	3.23
(19)	47 using it in real situations or sentences	3.15	12 other learners	3.41	26 guessing from the context	3.23
(20)	6 radio programmes	3.14	44 visualising spelling in my mind	3.37	8 other learners	3.19
(21)	26 guessing from the context	3.14	33 a bilingual dictionary	3.37	12 other learners	3.18
(22)	39 creating a mental image of the word	3.13	40 associating it with other keywords	3.36	44 visualising spelling in my mind	3.11
(23)	52 for pronunciation	3.13	50 by ordering words as met	3.34	20 words in vocabulary books	3.09
(24)	46 linking it to the situation in which it appeared	3.13	46 linking it to the situation in which it appeared	3.28	7 native L2 speakers	3.07
(25)	43 grouping with other L2 words of similar meanings	3.12	26 guessing from the context	3.28	35 to look up the derivation	3.00
(26)	19 words in dictionaries	3.08	39 creating a mental image of the word	3.28	25 my classmates	2.97
(27)	55 with both L1 equiv. and L2 synon	3.07	10 native L2 speakers	3.26	10 native L2 speakers	2.97
(28)	58 with a phrase, sentence, or context	3.06	13 essays, compositions	3.21	15 films/video cassettes	2.94
(29)	20 words in vocabulary books	2.99	18 vocabulary cards	3.10	50 by ordering words as met	2.93

Appendix D (Continued):
The descending mean scores of frequency in the use of vocabulary learning strategies for the three groups

	CE	Mean	BM	Mean	BF	Mean
(30)	28 L2 paraphrase	2.97	37 to check pronunciation	3.01	43 grouping with other L2 words of similar meanings	2.89
(31)	54 with L2 synonyms	2.96	52 for pronunciation	3.01	40 associating it with other keywords	2.89
(32)	57 for grammatical information	2.94	25 my classmates	2.99	28 L2 paraphrase	2.88
(33)	45 dividing it into parts by meaning	2.93	49 repeating the spelling aloud	2.96	55 with both L1 equiv. and L2 synon	2.87
(34)	51 grouping words by meaning	2.91	21 words in categories	2.94	19 words in dictionaries	2.82
(35)	14 taking notes	2.91	38 for examples of use	2.93	54 with L2 synonyms	2.79
(36)	17 cartoons/comics	2.91	43 grouping with other L2 words of similar meanings	2.89	3 literature	2.79
(37)	42 word analysis (root, prefix, suffix)	2.90	23 word formation	2.88	21 words in categories	2.74
(38)	22 translating/interpreting	2.89	28 L2 paraphrase	2.85	16 TV programmes	2.71
(39)	13 essays, compositions	2.86	45 dividing it into parts by meaning	2.81	51 grouping words by meaning	2.68
(40)	32 a monolingual dictionary	2.84	55 with both L1 equiv. and L2 synon	2.81	41 associating it with a L1 word with a similar sound	2.67
(41)	11 teachers of L2	2.83	42 word analysis (root, prefix, suffix)	2.74	1 newspapers/magazines	2.64
(42)	25 my classmates	2.78	15 films/video cassettes	2.73	56 for word formation/derivation	2.61
(43)	3 literature	2.76	56 for word formation/derivation	2.71	5 audio cassettes	2.57
(44)	56 for word formation/derivation	2.76	51 grouping words by meaning	2.66	23 word formation	2.49
(45)	50 by ordering words as met	2.73	54 with L2 synonyms	2.66	39 creating a mental image of the word	2.45
(46)	5 audio cassettes	2.72	36 to look up grammatical information	2.41	45 dividing it into parts by meaning	2.45
(47)	31 paying no particular attention	2.66	35 to look up the derivation	2.38	6 radio programmes	2.39
(48)	21 words in categories	2.64	3 literature	2.29	42 word analysis (root, prefix, suffix)	2.36
(49)	12 other learners	2.64	19 words in dictionaries	2.26	48	2.32
(50)	8 other learners	2.62	16 TV programmes	2.26	37 to check pronunciation	2.32
(51)	23 word formation	2.61	1 newspapers/magazines	2.18	32 a monolingual dictionary	2.31
(52)	1 newspapers/magazines	2.61	32 a monolingual dictionary	2.07	4 non-fiction	2.24
(53)	41 associating it with a L1 word with a similar sound	2.61	41 associating it with a L1 word with a similar sound	1.91	52 for pronunciation	2.19
(54)	7 native L2 speakers	2.51	4 non-fiction	1.85	49 repeating the spelling aloud	2.19
(55)	10 native L2 speakers	2.48	17 cartoons/comics	1.80	17 cartoons/comics	1.95
(56)	18 vocabulary cards	2.42	24. vocabulary games	1.75	24. vocabulary games	1.75
(57)	24. vocabulary games	2.31	31 paying no particular attention	1.66	18 vocabulary cards	1.75
(58)	4 non-fiction	2.18	6 radio programmes	1.65	31 paying no particular attention	1.74

Appendix D (Continued): The descending mean scores of efficiency in the use of vocabulary learning strategies for the three groups

	CE	Mean	BM	Mean	BF	Mean
(1)	34 to look up the meaning	3.89	9 teachers of L1	4.65	33 a bilingual dictionary	4.55
(2)	38 for examples of use	3.79	11 teachers of L2	4.64	34 to look up the meaning	4.49
(3)	37 to check pronunciation	3.77	27 the teacher	4.64	27 the teacher	4.44
(4)	40 associating it with other keywords	3.75	7 native L2 speakers	4.59	7 native L2 speakers	4.38
(5)	47 using it in real situations or sentences	3.71	10 native L2 speakers	4.58	9 teachers of L1	4.33
(6)	27 the teacher	3.71	2 textbooks	4.52	10 native L2 speakers	4.31
(7)	30 examples of use	3.71	30 examples of use	4.50	11 teachers of L2	4.28
(8)	6 radio programmes	3.65	58 with a phrase, sentence, or context	4.42	58 with a phrase, sentence, or context	4.15
(9)	16 TV programmes	3.65	22 translating/interpreting	4.36	53 with L1 equivalent	4.15
(10)	9 teachers of L1	3.64	47 using it in real situations or sentences	4.32	30 examples of use	4.13
(11)	15 films/video cassettes	3.60	13 essays, compositions	4.29	22 translating/interpreting	4.11
(12)	36 to look up grammatical information	3.59	34 to look up the meaning	4.24	38 for examples of use	4.09
(13)	52 for pronunciation	3.59	20 words in vocabulary books	4.23	47 using it in real situations or sentences	4.08
(14)	58 with a phrase, sentence, or context	3.58	5 audio cassettes	4.22	1 newspapers/magazines	3.98
(15)	43 grouping with other L2 words of similar meanings	3.57	53 with L1 equivalent	4.17	2 textbooks	3.98
(16)	35 to look up the derivation	3.57	57 for grammatical information	4.07	13 essays, compositions	3.97
(17)	49 repeating the spelling aloud	3.57	48 writing the word repeatedly	4.07	57 for grammatical information	3.86
(18)	33 a bilingual dictionary	3.56	33 a bilingual dictionary	4.00	46 linking it to the situation in which it appeared	3.86
(19)	46 linking it to the situation in which it appeared	3.53	14 taking notes	4.00	14 taking notes	3.85
(20)	48 writing the word repeatedly	3.53	18 vocabulary cards	3.91	36 to look up grammatical information	3.78
(21)	7 native L2 speakers	3.51	39 creating a mental image of the word	3.89	20 words in vocabulary books	3.78
(22)	39 creating a mental image of the word	3.47	38 for examples of use	3.87	55 with both L1 equiv. and L2 synon	3.71
(23)	11 teachers of L2	3.47	29 L1 equivalent	3.87	35 to look up the derivation	3.69
(24)	44 visualising spelling in my mind	3.47	40 associating it with other keywords	3.86	5 audio cassettes	3.66
(25)	13 essays, compositions	3.46	55 with both L1 equiv. and L2 synon	3.84	54 with L2 synonyms	3.64
(26)	10 native L2 speakers	3.46	23 word formation	3.83	3 literature	3.62
(27)	51 grouping words by meaning	3.45	21 words in categories	3.79	29 L1 equivalent	3.61
(28)	55. with both L1 equiv. and L2 synon	3.45	1 newspapers/magazines	3.74	6 radio programmes	3.61
(29)	2 textbooks	3.45	37 to check pronunciation	3.73	15 films/video cassettes	3.60

Appendix D (Continued): The descending mean scores of efficiency in the use vocabulary learning strategies for the three groups

	CE	Mean	BM	Mean	BF	Mean
(30)	32 a monolingual dictionary	3.42	46 linking it to the situation in which it appeared	3.71	16 TV programmes	3.58
(31)	54 with L2 synonyms	3.40	12 other learners	3.71	40 associating it with other keywords	3.56
(32)	45 dividing it into parts by meaning	3.38	15 films/video cassettes	3.71	43 grouping with other L2 words of similar meanings	3.54
(33)	57 for grammatical information	3.36	28 L2 paraphrase	3.64	21 words in categories	3.48
(34)	53 with L1 equivalent	3.36	44 visualising spelling in my mind	3.63	51 grouping words by meaning	3.45
(35)	14 taking notes	3.35	54 with L2 synonyms	3.63	28 L2 paraphrase	3.41
(36)	19 words in dictionaries	3.33	43 grouping with other L2 words of similar meanings	3.59	8 other learners	3.40
(37)	22 translating/interpreting	3.31	35 to look up the derivation	3.59	32 a monolingual dictionary	3.39
(38)	42 word analysis (root, prefix, suffix)	3.31	8 other learners	3.55	44 visualising spelling in my mind	3.38
(39)	28 L2 paraphrase	3.30	16 TV programmes	3.52	12 other learners	3.36
(40)	1 newspapers/magazines	3.29	6 radio programmes	3.51	19 words in dictionaries	3.34
(41)	17 cartoons/comics	3.28	3 literature	3.49	4 non-fiction	3.31
(42)	50 by ordering words as met	3.24	45 dividing it into parts by meaning	3.47	23 word formation	3.30
(43)	29 L1 equivalent	3.24	42 word analysis (root, prefix, suffix)	3.46	25 my classmates	3.30
(44)	5 audio cassettes	3.23	52 for pronunciation	3.44	37 to check pronunciation	3.19
(45)	20 words in vocabulary books	3.20	51 grouping words by meaning	3.43	56 for word formation/derivation	3.17
(46)	26 guessing from the context	3.20	24 vocabulary games	3.39	50 by ordering words as met	3.14
(47)	56 for word formation/derivation	3.17	25 my classmates	3.38	41 associating it with a L1 word with a similar sound	3.07
(48)	3 literature	3.13	56 for word formation/derivation	3.35	26 guessing from the context	3.06
(49)	21 words in categories	3.03	4 non-fiction	3.31	48 writing the word repeatedly	2.97
(50)	23 word formation	3.00	36 to look up grammatical information	3.30	39 creating a mental image of the word	2.93
(51)	8 other learners	2.98	17 cartoons/comics	3.26	42 word analysis (root, prefix, suffix)	2.91
(52)	25 my classmates	2.93	49 repeating the spelling aloud	3.24	45 dividing it into parts by meaning	2.91
(53)	12 other learners	2.91	26 guessing from the context	3.23	52 for pronunciation	2.88
(54)	41 associating it with a L1 word with a similar sound	2.90	50 by ordering words as met	3.22	18 vocabulary cards	2.87
(55)	24. vocabulary games	2.87	19 words in dictionaries	3.07	24. vocabulary games	2.84
(56)	18 vocabulary cards	2.87	32 a monolingual dictionary	3.06	49 repeating the spelling aloud	2.82
(57)	4 non-fiction	2.84	41 associating it with a L1 word with a similar sound	2.54	17 cartoons/comics	2.72
(58)	31 paying no particular attention	2.53	31 paying no particular attention	1.56	31 paying no particular attention	1.68

Appendix E:

CE's factors of Phase I questionnaire responses - Frequency

CE: Variables of Frequency	Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue	17.39	3.86	2.81	1.95
Percentage of data-set variance	30%	6.7%	4.8%	3.4%
No correlations > 0.3 with any factors				
Variable: Oblique Structure Matrix correlations (above .30 only)				
1. newspapers magazines			.50	.44
2. textbooks				
3. literature			.51	
4. non-fiction		.32	.68	
5. audio cassettes			.73	
6. radio programmes			.69	
7. native L2 speakers			.48	.64
8. other learners	.30		.33	.73
9. teachers of L1				.78
10. native L2 speakers	.31		.34	.68
11. teachers of L2	.31			.76
12. other learners	.39			.67
13. essays, compositions	.30			.41
14. taking notes				
15. films video cassettes	.34		.32	
16. TV programmes				
17. cartoons comics		.39		
18. vocabulary cards		.81		
19. words in dictionaries	.31			
20. words in vocabulary books	.42	.48		
21. words in categories	.35	.38		
22. translating interpreting	.31			.36
23. word formation		.52		
24. vocabulary games		.77		
25. my classmates	.30			
26. guessing from the context				.31
27. the teacher	.34			.40
28. L2 paraphrase	.39			
29. L1 equivalent	.46			
30. examples of use	.33			
31. paying no particular attention				
32. a monolingual dictionary				
33. a bilingual dictionary	.52			.30
34. to look up the meaning	.41			
35. to look up the derivation				
36. to look up grammatical information	.34			.40
37. to check pronunciation	.33			.35
38. for examples of use				.31
39. creating a mental image of the word				
40. associating it with other keywords	.47			
41. associating it with a L1 word with a similar sound	.32			
42. word analysis (root, prefix, suffix)		.57		
43. grouping with other L2 words of similar meanings	.57	.31		
44. visualising spelling in my mind	.43			
45. dividing it into parts by meaning		.56		
46. linking it to the situation in which it appeared	.56			.30
47. using it in real situations or sentences	.64			.34
48. writing the word repeatedly	.82			
49. repeating the spelling aloud	.82			.30
50. by ordering words as met	.33	.51		
51. grouping words by meaning	.67	.36		
52. for pronunciation	.69			.36
53. with L1 equivalent	.71			
54. with L2 synonyms	.57			
55. with both L1 equiv. and L2 synon.	.59			
56. for word formation derivation		.45		
57. for grammatical information	.52			.33
58. with a phrase, sentence, or context	.36	.32	.32	

Appendix E (Continued):

BM's factors of Phase I questionnaire responses - Frequency

BM: Variables of Frequency	Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue	7.20	7.04	4.55	3.57
Percentage of data-set variance	12.4%	12.4%	7.8%	6.2%
No correlations > 0.3 with any factors				
Variable: Oblique structure Matrix correlations (above .30 only)				
1. newspapers magazines				
2. textbooks				
3. literature		.47		
4. non-fiction				
5. audio cassettes				.52
6. radio programmes				
7. native L2 speakers				.82
8. other learners	.82			
9. teachers of L1	.38			
10. native L2 speakers				.81
11. teachers of L2	.69			
12. other learners	.78			
13. essays, compositions				
14. taking notes				
15. films video cassettes				
16. TV programmes				
17. cartoons comics				
18. vocabulary cards				
19. words in dictionaries		.30	.36	
20. words in vocabulary books				.30
21. words in categories			.30	
22. translating interpreting				
23. word formation				
24. vocabulary games				
25. my classmates				
26. guessing from the context			.44	
27. the teacher				
28. L2 paraphrase				
29. L1 equivalent				
30. examples of use	.42		.35	
31. paying no particular attention			.37	.30
32. a monolingual dictionary				
33. a bilingual dictionary				
34. to look up the meaning				
35. to look up the derivation		.52		
36. to look up grammatical information		.73		
37. to check pronunciation		.69		
38. for examples of use		.77		
39. creating a mental image of the word				
40. associating it with other keywords			.58	
41. associating it with a L1 word with a similar sound				.43
42. word analysis (root, prefix, suffix)			.58	
43. grouping with other L2 words of similar meanings			.72	
44. visualising spelling in my mind			.38	
45. dividing it into parts by meaning			.80	
46. linking it to the situation in which it appeared			.55	
47. using it in real situations or sentences	.36			
48. writing the word repeatedly				
49. repeating the spelling aloud		.33	.38	
50. by ordering words as met				
51. grouping words by meaning				
52. for pronunciation	.38			
53. with L1 equivalent				
54. with L2 synonyms		.35		
55. with both L1 equiv. and L2 synon.				
56. for word formation/derivation				
57. for grammatical information				
58. with a phrase, sentence, or context				

Appendix E (Continued):

BFs factors of Phase I questionnaire responses - Frequency

BF: Variables of Frequency	Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue	8.88	3.36	3.26	2.79
Percentage of data-set variance	15.3%	5.8%	5.6%	4.8%
No correlations > 0.3 with any factors				
Variable: Oblique structure Matrix correlations (above .30 only)				
1. newspapers magazines		.77		
2. textbooks	.60		.39	
3. literature		.71		
4. non-fiction		.65		
5. audio cassettes	.77			
6. radio programmes		.70		
7. native L2 speakers		.33		
8. other learners				
9. teachers of L1	.36			
10. native L2 speakers		.30		
11. teachers of L2	.49			
12. other learners				
13. essays, compositions				
14. taking notes	.45			
15. films video cassettes				.85
16. TV programmes				.89
17. cartoons comics				.66
18. vocabulary cards				
19. words in dictionaries				
20. words in vocabulary books				
21. words in categories			.34	
22. translating interpreting	.35			
23. word formation	.56			
24. vocabulary games	.31			.32
25. my classmates			.37	
26. guessing from the context				
27. the teacher			.57	
28. L2 paraphrase				
29. L1 equivalent				
30. examples of use			.54	
31. paying no particular attention				
32. a monolingual dictionary		.44		
33. a bilingual dictionary				
34. to look up the meaning				
35. to look up the derivation				.35
36. to look up grammatical information				
37. to check pronunciation				
38. for examples of use				
39. creating a mental image of the word				
40. associating it with other keywords			.32	
41. associating it with a L1 word with a similar sound				
42. word analysis (root, prefix, suffix)				
43. grouping with other L2 words of similar meanings			.58	
44. visualising spelling in my mind				
45. dividing it into parts by meaning				
46. linking it to the situation in which it appeared				
47. using it in real situations or sentences				
48. writing the word repeatedly				
49. repeating the spelling aloud				
50. by ordering words as met				
51. grouping words by meaning			.73	
52. for pronunciation				
53. with L1 equivalent				
54. with L2 synonyms			.32	
55. with both L1 equiv. and L2 synon.				
56. for word formation derivation	.34			.37
57. for grammatical information				
58. with a phrase, sentence, or context			.37	

Appendix E (Continued):

CE's factors of Phase I questionnaire responses - Efficiency

CE: Variables of Efficiency	Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue	21.59	3.13	2.76	1.75
Percentage of data-set variance	37.2%	5.4%	4.8%	3.0%
No correlations > 0.3 with any factors				
Variable: Oblique structure Matrix correlations (above .30 only)				
1. newspapers magazines		.44	-.32	.30
2. textbooks		.37		.51
3. literature	.36		-.34	
4. non-fiction		.33		
5. audio cassettes		.61		
6. radio programmes		.66	-.31	
7. native L2 speakers		.57	-.42	
8. other learners		.41		
9. teachers of L1		.48	-.44	.33
10. native L2 speakers	.38	.48	-.54	
11. teachers of L2	.35	.45	-.47	
12. other learners		.39		.30
13. essays, compositions	.40	.50		.49
14. taking notes		.43		.45
15. films video cassettes	.36	.76		
16. TV programmes		.83		.32
17. cartoons comics		.80		.32
18. vocabulary cards		.44		.36
19. words in dictionaries			-.40	.65
20. words in vocabulary books	.39	.30		.61
21. words in categories	.35	.30		.82
22. translating interpreting		.34		.75
23. word formation	.32	.34		.68
24. vocabulary games		.32		
25. my classmates	.30	.38	-.30	.39
26. guessing from the context				
27. the teacher	.56	.41	-.35	.57
28. L2 paraphrase	.51	.50		
29. L1 equivalent	.45	.31	-.64	
30. examples of use	.47	.48	-.44	
31. paying no particular attention			-.31	
32. a monolingual dictionary			-.31	
33. a bilingual dictionary	.35		-.43	
34. to look up the meaning	.42			.32
35. to look up the derivation	.32			.38
36. to look up grammatical information	.45	.36	-.42	.35
37. to check pronunciation	.47	.31	-.44	
38. for examples of use	.57	.37	-.45	.30
39. creating a mental image of the word	.35	.32	-.69	
40. associating it with other keywords	.57	.37	-.49	.37
41. associating it with a L1 word with a similar sound			-.73	
42. word analysis (root, prefix, suffix)	.34			
43. grouping with other L2 words of similar meanings	.33	.35	-.31	
44. visualising spelling in my mind			-.47	.33
45. dividing it into parts by meaning	.39	.37		.38
46. linking it to the situation in which it appeared	.54	.32		
47. using it in real situations or sentences	.41	.35		
48. writing the word repeatedly			-.35	
49. repeating the spelling aloud	.36	.36		
50. by ordering words as met	.31			.33
51. grouping words by meaning	.49	.30	-.35	.40
52. for pronunciation	.41	.34	-.46	.47
53. with L1 equivalent	.52		-.66	.35
54. with L2 synonyms	.68		-.38	
55. with both L1 equiv. and L2 synon.	.64		-.51	
56. for word formation derivation	.67	.31		.34
57. for grammatical information	.71	.34	-.38	.33
58. with a phrase, sentence, or context	.83			

Appendix E (Continued):

BM's factors of Phase I questionnaire responses - Efficiency

BM: Variables of Efficiency	Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue	9.42	5.39	4.49	3.56
Percentage of data-set variance	16.3%	9.3%	7.8%	6.1%
No correlations > 0.3 with any factors				
Variable: Oblique structure Matrix correlations (above .30 only)				
1. newspapers magazines			.46	.43
2. textbooks		-.30		
3. literature			.85	
4. non-fiction			.85	
5. audio cassettes				
6. radio programmes		-.31	.41	
7. native L2 speakers				
8. other learners		-.37		.33
9. teachers of L1				
10. native L2 speakers				
11. teachers of L2				
12. other learners		-.48		
13. essays, compositions			.37	
14. taking notes				.41
15. films video cassettes				
16. TV programmes				
17. cartoons comics				.90
18. vocabulary cards				
19. words in dictionaries	.39			
20. words in vocabulary books		.37		.32
21. words in categories				
22. translating interpreting	.33			
23. word formation	.50			.43
24. vocabulary games	.39			.36
25. my classmates				
26. guessing from the context		.78		
27. the teacher				
28. L2 paraphrase	.38			.52
29. L1 equivalent				
30. examples of use				
31. paying no particular attention				
32. a monolingual dictionary			.56	
33. a bilingual dictionary	.32			
34. to look up the meaning				
35. to look up the derivation				
36. to look up grammatical information				
37. to check pronunciation		-.55	.33	
38. for examples of use				
39. creating a mental image of the word			.46	
40. associating it with other keywords				
41. associating it with a L1 word with a similar sound				
42. word analysis (root, prefix, suffix)	.38			
43. grouping with other L2 words of similar meanings	.43			
44. visualising spelling in my mind				
45. dividing it into parts by meaning				
46. linking it to the situation in which it appeared			.39	.38
47. using it in real situations or sentences			.61	
48. writing the word repeatedly				.37
49. repeating the spelling aloud	.31			
50. by ordering words as met				
51. grouping words by meaning	.38		.41	
52. for pronunciation				
53. with L1 equivalent				
54. with L2 synonyms	.77			
55. with both L1 equiv. and L2 synon.	.86			
56. for word formation derivation	.48			.43
57. for grammatical information				
58. with a phrase, sentence, or context				

Appendix E (Continued):

BF's factors of Phase I questionnaire responses - Efficiency

BF: Variables of Efficiency	Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue	8.65	3.47	3.03	2.82
Percentage of data-set variance	14.9%	6.0%	5.2%	4.9%
No correlations > 0.3 with any factors				
Variable: Oblique structure Matrix correlations (above .30 only)				
1. newspapers magazines	.71			
2. textbooks				
3. literature	.49		-.32	
4. non-fiction	.43			
5. audio cassettes			-.76	
6. radio programmes	.69			
7. native L2 speakers	.78			
8. other learners				
9. teachers of L1				
10. native L2 speakers	.82			
11. teachers of L2	.38			
12. other learners				
13. essays, compositions				
14. taking notes				
15. films video cassettes	.32			
16. TV programmes	.30			
17. cartoons comics				
18. vocabulary cards			-.33	
19. words in dictionaries		.77		
20. words in vocabulary books		.83		
21. words in categories		.50		
22. translating interpreting	.38			
23. word formation				
24. vocabulary games			-.42	
25. my classmates				
26. guessing from the context				
27. the teacher		.31		
28. L2 paraphrase		.33		
29. L1 equivalent				
30. examples of use				
31. paying no particular attention				-.33
32. a monolingual dictionary	.40			
33. a bilingual dictionary				
34. to look up the meaning				
35. to look up the derivation				
36. to look up grammatical information			-.34	-.42
37. to check pronunciation			-.58	
38. for examples of use				
39. creating a mental image of the word				-.65
40. associating it with other keywords				-.69
41. associating it with a L1 word with a similar sound				
42. word analysis (root, prefix, suffix)				-.39
43. grouping with other L2 words of similar meanings	.33			-.36
44. visualising spelling in my mind		.30		
45. dividing it into parts by meaning				
46. linking it to the situation in which it appeared				
47. using it in real situations or sentences				
48. writing the word repeatedly				
49. repeating the spelling aloud				
50. by ordering words as met				
51. grouping words by meaning				
52. for pronunciation				
53. with L1 equivalent				
54. with L2 synonyms				
55. with both L1 equiv. and L2 synon.				
56. for word formation/derivation				
57. for grammatical information				
58. with a phrase, sentence, or context				

Appendix F: The reliability in the three groups' responses of the Phase I Questionnaires - Frequency

Frequency Factor 1		Correlation with (total-item score)		
Decontextual rote learning- note taking- contextual memorisation		CE (N= 257)	BF (N=235)	BM (N=63)
47	Memo/p: using it in real situations or sentences	.73	.44	.55
57	Take notes: for grammatical information	.68	.43	.28
54	Take notes: with L2 synonyms	.68	.51	.41
46	Memo/p: linking it to the situation in which it appeared	.67	.27	.42
43	Memo/p: grouping with other L2 words of similar meanings	.65	.27	.38
36	Use a dictionary: to look up grammatical information	.65	.30	.23
55	Take notes: with both L1 equiv. and L2 synon.	.64	.47	.51
52	Take notes: for pronunciation	.63	.34	.26
30	Get information through: examples of use	.61	.33	.33
49	Memo/p: repeating the spelling aloud	.61	.27	.28
53	Take notes: with L1 equivalent	.61	.28	.42
51	Take notes: grouping words by meaning	.60	.43	.37
48	Memo/p: writing the word repeatedly	.60	.19	.37
40	Memo/p: associating it with other keywords	.59	.34	.44
10	Speak to: native L2 speakers	.58	.21	.08
37	Use a dictionary: to check pronunciation	.57	.22	.29
58	Take notes: with a phrase, sentence, or context	.57	.53	.27
29	Get information through: L1 equivalent	.56	.35	.30
13	Write: essays, compositions	.56	.35	.00
20	Memorise: words in vocabulary books	.56	.35	.23
11	Speak to: teachers of L2	.55	.34	.37
28	Get information through: L2 paraphrase	.54	.40	.42
12	Speak to: other learners	.54	.35	.45
21	Memorise: words in categories	.53	.40	.26
44	Memo/p: visualising spelling in my mind	.53	.25	.25
22	Use: translating/interpreting	.53	.47	.18
19	Memorise: words in dictionaries	.49	.30	.32
8	Listen to: other learners	.49	.39	.39
34	Use a dictionary: to look up the meaning	.48	.35	.10
27	Get information through: the teacher	.47	.40	.28
15	Watch/read: films/video cassettes	.47	.18	.31
33	Use a dictionary: a bilingual dictionary	.45	.31	.11
41	Memo/p: associating it with a L1 word with a similar	.42	.20	.33
25	Get information through: my classmates	.34	.35	.15
	Reliability (all items): Alpha =	.94	.84	.81

Appendix F (Continued): The reliability in the three groups' responses of the Phase I questionnaires - Frequency

Frequency Factor 2		Correlation with (total-item score)		
Form analysis by tasks		CE (N= 268)	BF (N=229)	BM (N=67)
58	Take notes: with a phrase, sentence, or context	.60	.40	.09
51	Take notes: grouping words by meaning	.58	.33	.28
23	Use: word formation	.58	.42	.54
42	Memo/p: word analysis	.57	.32	.39
21	Memorise: words in categories	.57	.40	.45
43	Memo/p: grouping with other L2 words of similar meanings	.57	.41	.53
45	Memo/p: dividing it into parts by meaning	.56	.39	.33
56	Take notes: for word formation	.56	.44	.45
18	Watch/read: vocabulary cards	.53	.28	.16
20	Memorise: words in vocabulary books	.52	.29	.19
24	Use: vocabulary games	.51	.32	.51
17	Watch/read: cartoon/comics	.49	.22	.17
50	Take notes:by ordering words as met	.48	.24	-.05
4	Read L2: non-fiction	.41	.16	.09
	Reliability (all items): Alpha =	.87	.72	.67

Frequency Factor 3		Correlation with (total-item score)		
Contextual input		CE (N=278)	BF (N=229)	BM (N=73)
7	Listen to: native L2 speakers	.63	.60	.48
10	Speak to: native L2 speakers	.60	.55	.38
8	Listen to: other learners	.55	.33	-.00
4	Read L2: non-fiction	.54	.44	.33
1	Read L2: newspapers/magazines	.54	.55	.60
5	Listen to: audio cassettes	.52	-.03	-.09
58	Take notes: with a phrase, sentence, or context	.50	.11	-.01
3	Read L2: literature	.49	.43	.46
6	Listen to: radio programmes	.49	.44	.54
15	Watch/read L2: films/video cassettes	.41	.20	.48
	Reliability (all items): Alpha =	.83	.70	.73

Appendix F (Continued): The reliability in the three groups' responses of the Phase I Questionnaires - Frequency

Frequency Factor 4		Correlation with (total-item score)		
Communicative practice by social interaction		CE (N=272)	BF (N=245)	BM (N=69)
47	Memo/p: using it in real situations or sentences	.67	.46	.41
36	Use a dictionary: to look up grammatical information	.65	.29	.28
11	Speak to: teachers of L2	.64	.43	.40
10	Speak to: native L2 speakers	.64	.38	.19
57	Take notes: for grammatical information	.61	.37	-.00
46	Memo/p: linking it to the situation in which it appeared	.60	.25	.32
7	Listen to: native speakers	.60	.41	.25
37	Use a dictionary: to check pronunciation	.60	.23	.43
8	Listen to: other learners	.58	.49	.36
38	Use a dictionary: for examples of use	.58	.39	.53
52	Take notes: for pronunciation	.57	.27	.30
12	Speak to: other learners	.57	.44	.38
13	Write: essays, compositions	.56	.40	.25
1	Read L2: newspapers/magazines	.55	.30	.31
49	Memo/p: repeating the spelling aloud	.52	.17	.08
22	Use: translating/interpreting	.49	.45	.18
9	Listen to: teachers of L1	.48	.48	.25
27	Get information through: the teacher	.47	.33	.24
33	Use a dictionary: a bilingual dictionary	.39	.35	.24
26	Get information through: guessing from the context	.35	.09	.13
	Reliability (all items): Alpha =	.91	.79	.71

Appendix F (Continued): The reliability in the three groups' responses of the Phase I Questionnaires - Efficiency

	Efficiency Factor 1 Notes for retaining	CE (N= 205)	BF (N=181)	BM (N=45)
57	Take notes: for grammatical information	.74	.45	.37
40	Memo/p: associating it with other keywords	.73	.42	.34
38	Use a dictionary: for examples of use	.71	.39	.36
46	Memo/p: linking it to the situation in which it appeared	.70	.32	.32
30	Get information through: examples of use	.70	.22	.50
47	Memo/p: using it in real situations or sentences	.69	.46	.46
55	Take notes: with a phrase, sentence, or context	.68	.43	.55
37	Use a dictionary: to check pronunciation	.68	.33	.37
34	Use a dictionary: a bilingual dictionary	.68	.24	.20
51	Take notes: grouping words by meaning	.68	.33	.52
36	Use a dictionary: to look up grammatical information	.67	.36	.25
43	Memo/p: grouping with other L2 words of similar meanings	.66	.47	.44
52	Take notes: for pronunciation	.66	.39	.9
54	Take notes: with L2 synonyms	.66	.48	.52
13	Write: essays, compositions	.65	.26	.51
58	Take notes: with a phrase, sentence, or context	.65	.45	.43
45	Memo/p: dividing it into parts by meanings	.64	.40	.31
28	Get information through: L2 paraphrase	.64	.30	.44
33	Use a dictionary: a bilingual dictionary	.63	.39	.27
10	Speak to: native L2 speakers	.63	.35	.40
39	Memo/p: creating a mental image of the word	.61	.31	.34
56	Take notes: for word formation	.61	.50	.36
49	Memo/p: repeating the spelling aloud	.60	.28	.44
27	Get information through: the teacher	.60	.20	.32
35	Use a dictionary: to look up the derivation	.60	.37	.31
53	Take notes: with L1 equivalent	.59	.35	.10
29	Get info. through: L1 equivalent	.59	.20	.29
11	Speak to: teachers of L2	.58	.30	.37
15	Watch/read: films/video cassettes	.58	.26	.20
20	Memorise: words in vocabulary books	.58	.29	.07
21	Memorise: words in categories	.53	.35	.14
23	Use: word formation	.53	.30	.45
3	Read L2: literature	.53	.28	.38
42	Memo/p: word analysis	.47	.40	.41
50	Take notes: by ordering words as met	.47	.37	.28
25	Get information through: my classmates	.39	.22	.17
	Reliability (all items): Alpha =	.90	.85	.85

Appendix F (Continued): The reliability in the three groups' responses of the Phase I Questionnaires - Efficiency

	Efficiency Factor 2 Audio-visual contextual input	CE (N=195)	BF (N=172)	BM (N=44)
13	Write: essays, compositions	.71	.30	.47
40	Memo/p: associating it with other keywords	.69	.42	.33
38	Use a dictionary: for examples of use	.68	.31	.42
57	Take notes: for grammatical information	.66	.44	.38
30	Get information through: examples of use	.66	.22	.45
51	Take notes: grouping words by meaning	.66	.27	.31
47	Memo/p: using it in real situations or sentences	.66	.45	.45
10	Speak to: native L2 speakers	.66	.45	.55
15	Watch/read: films/video cassettes	.65	.38	.38
7	Listen to: native L2 speakers	.65	.44	.36
28	Get information through: L2 paraphrase	.64	.31	.44
46	Memo/p: linking it to the situation in which it appeared	.64	.28	.34
37	Use a dictionary: to check pronunciation	.63	.31	.40
11	Speak to: teachers of L2	.63	.42	.45
22	Use: translating/interpreting	.62	.36	.56
36	Use a dictionary: to look up grammatical information	.61	.40	.30
43	Memo/p: grouping with other L2 words of similar meanings	.61	.39	.19
52	Take notes: for pronunciation	.61	.32	.08
5	Listen to: audio cassettes	.61	.28	.20
6	Listen to: radio programmes	.61	.44	.39
20	Memorise: words in vocabulary books	.61	.29	.04
45	Memo/p: dividing it into parts by meaning	.60	.37	.27
1	Read L2: newspapers/magazines	.59	.50	.41
49	Memo/p: repeating the spelling aloud	.59	.23	.53
16	Watch TV programmes	.59	.39	.52
9	Listen to: teachers of L1	.59	.38	.48
21	Memorise: words in categories	.58	.35	.08
27	Get information through: the teacher	.58	.20	.40
39	Memo/p: creating a mental image of the word	.56	.29	.36
23	Use: vocabulary games	.56	.33	.53
56	Take notes: for word formation	.55	.45	.28
14	Write: taking notes	.55	.06	.37
12	Speak to: other learners	.55	.25	.47
29	Get information through: L1 equivalent	.54	.20	.13
8	Listen to: other learners	.54	.30	.37
4	Read L2: non-fiction	.54	.26	.53
17	Watch/read L2: cartoons/comics	.50	.23	.47
18	Watch/read L2: vocabulary cards	.50	.35	.18
2	Read L2: textbooks	.48	.26	.12
24	Use: vocabulary games	.44	.37	.46
25	Get information through: my classmates	.38	.21	.15
	Reliability (all items): Alpha =	.96	.85	.87

Appendix F (Continued): The reliability in the three groups' responses of the Phase I Questionnaires - Efficiency

	Efficiency Factor 3 Retaining Restriction	CE (N= 208)	BF (N=194)	BM (N=47)
38	Use a dictionary: for examples of use	.71	.39	.43
57	Take notes: for grammatical information	.70	.46	.47
30	Get information through: examples of use	.70	.22	.46
52	Take notes: for pronunciation	.69	.31	.18
33	Use a dictionary: a bilingual dictionary	.69	.39	.28
36	Use a dictionary: to look up grammatical information	.69	.40	.41
51	Take notes: grouping words by meaning	.69	.32	.35
40	Memo/p: associating it with other keywords	.68	.41	.28
37	Use a dictionary: to check pronunciation	.68	.24	.54
10	Speak to: native L2 speakers	.67	.45	.38
11	Speak to: teachers of L2	.67	.37	.38
7	Listen to: native L2 speakers	.66	.43	.36
27	Get information through: the teacher	.66	.24	.36
55	Take notes: with both L1 equiv. and L2 synon.	.66	.40	.51
54	Take notes: with L2 synonyms	.64	.48	.57
43	Memo/p: grouping with other L2 words of similar meanings	.64	.43	.31
39	Memo/p: creating a mental image of the word	.62	.26	.30
29	Get information through: L1 equivalent	.62	.16	.28
1	Read L2: newspapers/magazines	.62	.46	.35
9	Listen to: teachers of L1	.62	.34	.39
53	Take notes: with L1 equivalent	.61	.40	.17
6	Listen to: radio programmes	60	.37	.22
3	Read L2: literature	.60	.30	.39
44	Memo/p: visualising spelling in my mind	.60	.37	.09
19	Memorise: words in dictionaries	.56	.18	-.00
48	Memo/p: writing the word repeatedly	.52	.16	.20
32	Use a dictionary: a monolingual dictionary.	.52	.31	.47
41	Memo/p: associating it with a L1 word with a similar sound	.46	.14	.07
25	Get info. through: my classmates	.39	.18	.11
	Reliability (all items): Alpha =	.95	.81	.80

Appendix F (Continued): The reliability in the three groups' responses of the Phase I Questionnaires - Efficiency

	Efficiency Factor 4 Decontextual retaining	CE (N= 210)	BF (N=184)	BM (N=46)
40	Memo/p: associating it with other keywords	.70	.35	.26
13	Write: essays, compositions	.68	.37	.45
38	Use a dictionary: for examples of use	.67	.27	.34
57	Take notes: for grammatical information	.67	.39	.21
28	Get info. through: L2 paraphrase	.66	.26	.33
34	Use a dictionary: to look up the meaning	.65	.18	-.01
51	Take notes: grouping words by meaning	.65	.30	.34
36	Use a dictionary: to look up grammatical information	.64	.41	.25
21	Memorise: words in categories	.64	.37	.22
22	Use: translating/interpreting	.63	.32	.37
45	Memo/p: dividing it into parts by meaning	.63	.32	.32
20	Memorise: words in vocabulary books	.62	.40	.15
23	Use: vocabulary games	.62	.40	.57
52	Take notes: for pronunciation	.62	.30	.16
14	Write: taking notes	.61	.15	.38
35	Use a dictionary: to look up grammatical info.	.60	.41	.30
16	Watch TV programmes	.59	.26	.30
1	Read L2: newspapers/magazines	.58	.39	.27
56	Take notes: for word formation	.57	.48	.51
44	Memo/p: visualising spelling in my mind	.55	.39	.17
9	Listen to: teachers of L1	.55	.31	.30
2	Read L2: textbooks	.53	.24	.17
19	Memorise: words in dictionaries	.53	.34	.04
24	Use: vocabulary games	.52	.31	.50
18	Watch/read L2: vocabulary cards	.52	.30	.11
53	Take notes: with L1 equivalent	.52	.27	-.08
12	Speak to: other learners	.50	.14	.42
26	Get info. through: guessing from the context	.50	.17	.07
17	Watch/read L2: cartoons/comics	.47	.23	.36
50	Take notes: by ordering words as met	.47	.34	.34
	Reliability (all items): Alpha =	.94	.80	.76

Appendix 6: Phase II main study

Questionnaire -- Chinese Vocabulary

This questionnaire is about your knowledge of Chinese vocabulary and your opinions about the ways of learning Chinese vocabulary.

Before you answer the questions from the next page, please give brief information about yourself in the following column.

Sex: ☐ Male ☐ Female

Age: ☐ 11-15 ☐ 16-19 ☐ 20-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ 41-50 ☐ 51+

Which language(s) do you use at home? .....

Do you use English to communicate with other people in your daily life outside the classroom? ☐ Yes ☐ No

What is your major field of study in this university? .....

Years of Learning English: ☐ Under 3 ☐ 4-6 ☐ 7-10 ☐ 11-13 ☐ 14-16 ☐ 17+

Have you studied or are you studying any other foreign language? If so, please write *which* language, *when* and *for how long*?

.....

In Part I, you are asked to give responses to some Chinese words which may reflect Chinese cultural thinking. Please think how they may be interpreted or explained in English to English speakers, i.e. **what do the words mean? (這些字可包含那些意思？)**

For each target word, look at each possible definition, and note your agreement or disagreement on the scale in the table, **i.e. do you agree or disagree that each item is part of the meaning of the word? (你是否同意每一小題可為該字的部分解釋?)** Not every definition listed is suitable for each word, so please do evaluate each definition carefully. Please also write down any other definitions you can think of in the space provided.
For example,

		strongly disagree	disagree	mildly disagree	neutral	mildly agree	agree	strongly agree	no idea/ unsure
誠 cheng	1. is a virtue						V		
	2. includes a sense of morality							V	
	3. is reciprocal (相互的) harmony with others		V						
	** Your Own Definition:	*GENUINE;*		*IS PROPRIETY;* (禮節;禮數)					

In Part II, there is a similar table for you to give your opinion about whether these words are easy or difficult to learn and which methods might be effective to learn them.

Many Thanks for Your Help !!

Appendix 6 (Continued): Phase II main study

Questionnaire -- Chinese Vocabulary

PART I: KNOWLEDGE OF CHINESE VOCABULARY

		strongly disagree	disagree	mildly disagree	neutral	mildly agree	agree	strongly agree	no idea/ unsure
仁 ren	1. is a virtue								
	2. includes a sense of morality								
	3. is gentleman-like behaviour								
	4. is reciprocal harmony with others								
	5. shows kind-heartedness								
	6. filial piety is one aspect of this								
	7. is propriety								
	8. includes moderation								
	9. shows self sacrifice								
	10. is a person with courtesy								
	11. includes obedient manners								
	12. is humanity								
	**Your Own Definition:								
禮 li	1. is a virtue								
	2. includes a sense of morality								
	3. is gentleman-like behaviour								
	4. is reciprocal harmony with others								
	5. shows kind-heartedness								
	6. filial piety is one aspect of this								
	7. is propriety								
	8. includes moderation								
	9. shows self sacrifice								
	10. is a person with courtesy								
	11. includes obedient manners								
	12. is humanity								
	**Your Own Definition:								
孝 xiao	1. is a virtue								
	2. includes a sense of morality								
	3. is gentleman-like behaviour								
	4. is reciprocal harmony with others								
	5. shows kind-heartedness								
	6. filial piety is one aspect of this								
	7. is propriety								
	8. includes moderation								
	9. shows self sacrifice								
	10. is a person with courtesy								
	11. includes obedient manners								
	12. is humanity								
	**Your Own Definition:								

(Continuous)

Appendix G (Continued): Phase II main study

Questionnaire -- Chinese Vocabulary

PART I (CONTINUED): KNOWLEDGE OF CHINESE VOCABULARY

		strongly disagree	disagree	mildly disagree	neutral	mildly agree	agree	strongly agree	no idea/ unsure
德 de	1. is a virtue								
	2. includes a sense of morality								
	3. is gentleman-like behaviour								
	4. is reciprocal harmony with others								
	5. shows kind-heartedness								
	6. filial piety is one aspect of this								
	7. is propriety								
	8. includes moderation								
	9. shows self sacrifice								
	10. is a person with courtesy								
	11. includes obedient manners								
	12. is humanity								
	**Your Own Definition:								
和 he	1. is a virtue								
	2. includes a sense of morality								
	3. is gentleman-like behaviour								
	4. is reciprocal harmony with others								
	5. shows kind-heartedness								
	6. filial piety is one aspect of this								
	7. is propriety								
	8. includes moderation								
	9. shows self sacrifice								
	10. is a person with courtesy								
	11. includes obedient manners								
	12. is humanity								
	**Your Own Definition:								
君子 junzi	1. shows virtue								
	2. has a sense of morality								
	3. is a gentleman								
	4. shows reciprocal harmony with others								
	5. has kind-heartedness								
	6. filial piety is one aspect of this								
	7. shows propriety								
	8. shows moderation								
	9. shows self sacrifice								
	10. shows courtesy								
	11. has obedient manners								
	12. shows humanity								
	**Your Own Definition:								

(Please continue Part II)

Appendix 6 (Continued): Phase II main study

Questionnaire -- Chinese Vocabulary

PART II: LEARNING OF CHINESE VOCABULARY

(1) Please judge whether you think it is easy or difficult to learn the meanings of these words.

	very difficult	difficult	neutral	easy	very easy
1. ren 仁					
2. li 禮					
3. xiao 孝					
4. de 德					
5. he 和					
6. junzi 君子					

** Do you have any comments about teaching/learning these words?

.....

.....

(2) Do you agree or disagree if the six words are learned effectively by the following methods?

Learning the above Chinese words can be effective by	Strongly disagree	disagree	neutral	agree	Strongly agree
1. using textbooks					
2. teachers' help					
3. visualising these words in mind					
4. translating into English					
5. using a bilingual dictionary to check meanings					
6. other learners' help					
7. real contexts					
8. example of use					
9. writing essays/compositions					
10. resources, like TV/radio programmes/films/cassettes.					
11. using vocabulary cards					
12. writing or reading repeatedly					
13. using a bilingual dictionary to check pronunciation or grammatical information					
14. learning from Chinese speakers					
15. memorising in vocabulary books					
16. associating with other words					
17. taking notes					

** Any other methods you may suggest apart from the above listed items?

.....

THE END

THANK YOU

Appendix H: The factors of the six cultural keywords derived from the CE and BM groups' responses

Factor 1 of *ren*	CE	BM
Eigenvalue	3.06	2.91
Percentage of data-set variance	25.5	24.3
1. is a virtue	-.00	-.32
2. includes a sense of morality	.11	.17
3. is gentleman-like behaviour	.16	-.40
4. is reciprocal harmony with others	.38	.24
5. shows kind-heartedness	-.06	-.25
6. filial piety is one aspect of this	.77	.90
7. is propriety	.59	.25
8. includes moderation	.64	.89
9. shows self sacrifice	.59	.06
10. is a person with courtesy	.66	.22
11. includes obedient manners	.76	.56
12. is humanity	.20	-.04

Factor 2 of *ren*	CE	BM
Eigenvalue	1.81	2.59
Percentage of data-set variance	15.1	21.6
1. is a virtue	.85	.19
2. includes a sense of morality	.87	.05
3. is gentleman-like behaviour	.34	.38
4. is reciprocal harmony with others	.04	.29
5. shows kind-heartedness	.14	.88
6. filial piety is one aspect of this	.09	-.25
7. is propriety	.04	-.21
8. includes moderation	-.08	.03
9. shows self sacrifice	.31	.81
10. is a person with courtesy	.06	.50
11. includes obedient manners	.00	.46
12. is humanity	.15	-.15

Appendix H (Continued): The factors of the six cultural keywords derived from the CE and BM groups' responses

Factor 3 of *ren*	CE	BM
Eigenvalue	1.31	1.85
Percentage of data-set variance	11.0	15.5
1. is a virtue	-.08	.00
2. includes a sense of morality	-.00	.28
3. is gentleman-like behaviour	-.66	.65
4. is reciprocal harmony with others	-.47	-.52
5. shows kind-heartedness	-.01	-.16
6. filial piety is one aspect of this	-.13	-.26
7. is propriety	.20	.08
8. includes moderation	-.16	-.11
9. shows self sacrifice	.15	.06
10. is a person with courtesy	-.16	.21
11. includes obedient manners	.06	.06
12. is humanity	.73	.88

Factor 4 of *ren*	CE	BM
Eigenvalue	1.03	1.17
Percentage of data-set variance	8.6	9.8
1. is a virtue	-.09	-.31
2. includes a sense of morality	.20	.03
3. is gentleman-like behaviour	.29	-.11
4. is reciprocal harmony with others	.28	-.64
5. shows kind-heartedness	.90	-.12
6. filial piety is one aspect of this	.08	-.13
7. is propriety	.00	-.87
8. includes moderation	-.04	-.25
9. shows self sacrifice	.07	-.11
10. is a person with courtesy	.21	-.79
11. includes obedient manners	.06	-.42
12. is humanity	.45	-.04

Appendix H (Continued): The factors of the six cultural keywords derived from the CE and BM groups' responses

Factor 1 of *li*	CE	BM
Eigenvalue	2.95	4.75
Percentage of data-set variance	24.7	39.6
1. is a virtue	.00	.57
2. includes a sense of morality	.37	.73
3. is gentleman-like behaviour	-.04	.93
4. is reciprocal harmony with others	.21	.25
5. shows kind-heartedness	.75	-.27
6. filial piety is one aspect of this	.72	.85
7. is propriety	.03	.63
8. includes moderation	.07	.81
9. shows self sacrifice	.64	-.11
10. is a person with courtesy	.03	-.03
11. includes obedient manners	.68	.88
12. is humanity	.73	.32

Factor 2 of *li*	CE	BM
Eigenvalue	1.97	2.33
Percentage of data-set variance	16.5	19.4
1. is a virtue	.16	.38
2. includes a sense of morality	.10	.70
3. is gentleman-like behaviour	.31	.01
4. is reciprocal harmony with others	.22	-.07
5. shows kind-heartedness	.01	.17
6. filial piety is one aspect of this	.14	.11
7. is propriety	.63	.15
8. includes moderation	.77	-.28
9. shows self sacrifice	.33	.83
10. is a person with courtesy	.62	.77
11. includes obedient manners	.14	-.02
12. is humanity	-.23	.17

Appendix H (Continued): The factors of the six cultural keywords derived from the CE and BM groups' responses

Factor 3 of *li*	CE	BM
Eigenvalue	1.28	1.56
Percentage of data-set variance	10.7	13.1
1. is a virtue	-.80	-.27
2. includes a sense of morality	-.76	-.01
3. is gentleman-like behaviour	-.30	.09
4. is reciprocal harmony with others	-.06	-.12
5. shows kind-heartedness	-.21	.81
6. filial piety is one aspect of this	-.21	-.24
7. is propriety	-.32	-.44
8. includes moderation	.00	.14
9. shows self sacrifice	.05	.21
10. is a person with courtesy	-.08	.18
11. includes obedient manners	.24	-.08
12. is humanity	-.10	.85

Factor 4 of *li*	CE	BM
Eigenvalue	1.01	1.04
Percentage of data-set variance	8.5	8.7
1. is a virtue	-.29	-.27
2. includes a sense of morality	-.03	-.01
3. is gentleman-like behaviour	-.68	.09
4. is reciprocal harmony with others	-.82	-.12
5. shows kind-heartedness	-.11	.81
6. filial piety is one aspect of this	-.02	-.24
7. is propriety	-.24	-.44
8. includes moderation	-.13	.14
9. shows self sacrifice	.20	.21
10. is a person with courtesy	-.21	.18
11. includes obedient manners	-.34	-.08
12. is humanity	-.12	.85

Appendix H (Continued): The factors of the six cultural keywords derived from the CE and BM groups' responses

Factor 1 of *xiao*	CE	BM
Eigenvalue	4.35	3.97
Percentage of data-set variance	36.3	33.1
1. is a virtue	.02	.26
2. includes a sense of morality	.03	-.07
3. is gentleman-like behaviour	.25	.84
4. is reciprocal harmony with others	.39	.59
5. shows kind-heartedness	.59	.08
6. filial piety is one aspect of this	.37	.26
7. is propriety	.37	.04
8. includes moderation	.78	.21
9. shows self sacrifice	.71	.88
10. is a person with courtesy	.71	.05
11. includes obedient manners	.71	.75
12. is humanity	.09	-.87

Factor 2 of *xiao*	CE	BM
Eigenvalue	1.51	2.46
Percentage of data-set variance	12.7	20.5
1. is a virtue	.33	.63
2. includes a sense of morality	.59	.87
3. is gentleman-like behaviour	.85	.07
4. is reciprocal harmony with others	.80	-.11
5. shows kind-heartedness	.68	.15
6. filial piety is one aspect of this	.00	.77
7. is propriety	.45	.25
8. includes moderation	.36	-.60
9. shows self sacrifice	.19	.03
10. is a person with courtesy	.59	-.31
11. includes obedient manners	.10	.38
12. is humanity	.58	.10

Factor 3 of *xiao*	CE	BM
Eigenvalue	1.41	1.95
Percentage of data-set variance	11.8	16.3
1. is a virtue	.80	-.08
2. includes a sense of morality	.53	.21
3. is gentleman-like behaviour	.03	.09
4. is reciprocal harmony with others	.04	.07
5. shows kind-heartedness	.13	.86
6. filial piety is one aspect of this	.73	.05
7. is propriety	.36	.27
8. includes moderation	.00	.45
9. shows self sacrifice	.09	.25
10. is a person with courtesy	.05	.81
11. includes obedient manners	.38	.40
12. is humanity	.34	.22

Appendix H (Continued): The factors of the six cultural keywords derived from the CE and BM groups' responses

Factor 1 of *de*	CE	BM
Eigenvalue	4.47	4.38
Percentage of data-set variance	37.3	36.6
1. is a virtue	.16	-.06
2. includes a sense of morality	.31	-.04
3. is gentleman-like behaviour	.61	.68
4. is reciprocal harmony with others	.48	.83
5. shows kind-heartedness	.33	.77
6. filial piety is one aspect of this	.56	.56
7. is propriety	.74	.17
8. includes moderation	.71	.78
9. shows self sacrifice	.55	.78
10. is a person with courtesy	.86	.36
11. includes obedient manners	.70	.29
12. is humanity	.17	.15

Factor 2 of *de*	CE	BM
Eigenvalue	1.81	2.39
Percentage of data-set variance	15.1	20.0
1. is a virtue	.88	.87
2. includes a sense of morality	.83	.89
3. is gentleman-like behaviour	.56	.15
4. is reciprocal harmony with others	.41	-.22
5. shows kind-heartedness	.26	.09
6. filial piety is one aspect of this	.06	.62
7. is propriety	.21	.22
8. includes moderation	.37	-.02
9. shows self sacrifice	-.16	-.09
10. is a person with courtesy	.21	-.29
11. includes obedient manners	-.17	.16
12. is humanity	-.07	.35

Factor 3 of *de*	CE	BM
Eigenvalue	1.16	1.59
Percentage of data-set variance	9.7	13.3
1. is a virtue	.10	-.28
2. includes a sense of morality	.13	-.15
3. is gentleman-like behaviour	.14	-.55
4. is reciprocal harmony with others	.65	-.11
5. shows kind-heartedness	.80	-.12
6. filial piety is one aspect of this	.57	-.11
7. is propriety	.39	-.81
8. includes moderation	-.01	-.38
9. shows self sacrifice	.52	-.55
10. is a person with courtesy	.33	-.72
11. includes obedient manners	.45	-.89
12. is humanity	.65	-.61

Appendix H (Continued): The factors of the six cultural keywords derived from the CE and BM groups' responses

Factor 1 of *he*	CE	BM
Eigenvalue	4.05	4.53
Percentage of data-set variance	33.8	37.8
1. is a virtue	.21	.87
2. includes a sense of morality	.32	.83
3. is gentleman-like behaviour	.27	.44
4. is reciprocal harmony with others	.01	.09
5. shows kind-heartedness	.49	.37
6. filial piety is one aspect of this	.77	.84
7. is propriety	.56	.28
8. includes moderation	.59	-.07
9. shows self sacrifice	.77	.25
10. is a person with courtesy	.70	-.27
11. includes obedient manners	.59	.20
12. is humanity	.38	.20

Factor 2 of *he*	CE	BM
Eigenvalue	1.72	2.06
Percentage of data-set variance	14.3	17.2
1. is a virtue	.76	-.00
2. includes a sense of morality	.72	-.26
3. is gentleman-like behaviour	.79	.07
4. is reciprocal harmony with others	.62	.82
5. shows kind-heartedness	.50	.06
6. filial piety is one aspect of this	.25	.13
7. is propriety	.44	-.01
8. includes moderation	.31	.91
9. shows self sacrifice	.09	.32
10. is a person with courtesy	.32	-.00
11. includes obedient manners	.05	.37
12. is humanity	.52	.11

Appendix H (Continued): The factors of the six cultural keywords derived from the CE and BM groups' responses

Factor 1 of *junzi*	CE	BM
Eigenvalue	4.77	5.66
Percentage of data-set variance	39.8	47.2
1. shows virtue	.38	.34
2. has a sense of morality	.37	33
3. shows gentleman-like behaviour	.35	.01
4. shows reciprocal harmony with others	.67	.45
5. shows kind-heartedness	.70	.76
6. filial piety is one aspect of this	.60	.31
7. shows propriety	.85	.89
8. shows moderation	.81	.82
9. shows self sacrifice	.29	.04
10. shows courtesy	.66	.47
11. has obedient manners	.35	-.28
12. shows humanity	.33	.55

Factor 2 of *junzi*	CE	BM
Eigenvalue	1.49	1.87
Percentage of data-set variance	12.5	15.7
1. shows virtue	-.81	.85
2. has a sense of morality	-.90	.89
3. shows gentleman-like behaviour	-.71	.23
4. shows reciprocal harmony with others	-.35	.46
5. shows kind-heartedness	-.44	.38
6. filial piety is one aspect of this	-.30	.39
7. shows propriety	-.39	.32
8. shows moderation	-.28	.38
9. shows self sacrifice	-.19	.57
10. shows courtesy	-.39	.76
11. has obedient manners	-.06	.74
12. shows humanity	-.46	.55

Factor 3 of *junzi*	CE	BM
Eigenvalue	1.13	1.24
Percentage of data-set variance	9.5	10.3
1. shows virtue	.17	.15
2. has a sense of morality	.30	.27
3. shows gentleman-like behaviour	.05	.96
4. shows reciprocal harmony with others	.39	.25
5. shows kind-heartedness	.51	.46
6. filial piety is one aspect of this	.54	-.06
7. shows propriety	.16	-.08
8. shows moderation	.22	.19
9. shows self sacrifice	.84	.63
10. shows courtesy	.38	.57
11. has obedient manners	.80	.30
12. shows humanity	.62	.08

Appendix I: Detailed information of the CE and BM groups' factors of the six cultural keywords

CE: *ren*	F1	F2	F3	F4
1. is a virtue		.85		
2. includes a sense of morality		.87		
3. is gentleman-like behaviour		.34	-.66	
4. is reciprocal harmony with others	.38		-.47	
5. shows kind-heartedness				.90
6. filial piety is one aspect of this	.77			
7. is propriety	.59			
8. includes moderation	.64			
9. shows self sacrifice	.59	.31		
10. is a person with courtesy	.66			
11. includes obedient manners	.76			
12. is humanity			.73	.45
Eigenvalue	3.06	1.81	1.31	1.03
Percentage of data-set variance	25.5	15.1	11.0	8.6
Reliability (all items) Alpha =	.76 (N=124)	-	-	-
Correlations > 0.3 with any factors	-	-	-	-

(F: Factor; N: Number of the responses)
(-: no reliability > .70; no correlations > .30 with other factors)

CE: *li*	F1	F2	F3	F4
1. is a virtue			-.80	
2. includes a sense of morality	.37		-.76	
3. is gentleman-like behaviour		.31	-.30	-.68
4. is reciprocal harmony with others				-.82
5. shows kind-heartedness	.75			
6. filial piety is one aspect of this	.72			
7. is propriety		.63	-.32	
8. includes moderation		.77		
9. shows self sacrifice	.64	.33		
10. is a person with courtesy		.62		
11. includes obedient manners	.68			-.34
12. is humanity	.73			
Eigenvalue	2.95	1.97	1.28	1.01
Percentage of data-set variance	24.7	16.5	10.7	8.5
Reliability (all items) Alpha =	.73 (N=134)	-	-	-
Correlations > 0.3 with any factors	-	-	-	-

(F: Factor; N: Number of the responses)
(-: no reliability > .70; no correlations > .30 with other factors)

Appendix I (Continued): Detailed information of the CE and BM groups' factors of the six cultural keywords

CE: *xiao*	F1	F2	F3
1. is a virtue		.33	.80
2. includes a sense of morality		.59	.53
3. is gentleman-like behaviour		.85	
4. is reciprocal harmony with others	.39	.80	
5. shows kind-heartedness	.59	.68	
6. filial piety is one aspect of this	.37		.73
7. is propriety	.37	.45	.36
8. includes moderation	.78	.36	
9. shows self sacrifice	.71		
10. is a person with courtesy	.71	.59	
11. includes obedient manners	.71		.38
12. is humanity		.58	.34
Eigenvalue	4.35	1.51	1.41
Percentage of data-set variance	36.3	12.7	11.8
Reliability (all items) Alpha =	.81 (N=124)	.82 (N=126)	-
Correlations > 0.3 with any factors	-	-	-

(F: Factor; N: Number of the responses)
(-: no reliability > .70; no correlations > .30 with other factors)

CE: *de*	F1	F2	F3
1. is a virtue		.88	
2. includes a sense of morality	.31	.83	
3. is gentleman-like behaviour	.61	.56*	
4. is reciprocal harmony with others	.48	.41*	.65
5. shows kind-heartedness	.33		.80
6. filial piety is one aspect of this	.56		.57
7. is propriety	.74		.39
8. includes moderation	.71	.37*	
9. shows self sacrifice	.55		.52
10. is a person with courtesy	.86		.33
11. includes obedient manners	.70		.45
12. is humanity			.65
Eigenvalue	4.47	1.81	1.16
Percentage of data-set variance	37.3	15.1	9.7
Reliability (all items) Alpha =	.84 (N=126)	.70[2] (N=140)	.82 (N=126)
Correlations > 0.3 with any factors	F1 & F3 (.36)		

(* indicates the item to be removed in order to raise up reliability)
(F: Factor; N: Number of the responses)

[2] Reliability alpha will be .82 (N=149) when the * items were excluded.

Appendix I (Continued): Detailed information of the CE and BM groups' factors of the six cultural keywords

CE: *he*	F1	F2
1. is a virtue		.76
2. includes a sense of morality	.32	.72
3. is gentleman-like behaviour		.79
4. is reciprocal harmony with others		.62
5. shows kind-heartedness	.49	.50
6. filial piety is one aspect of this	.77	
7. is propriety	.56	.44
8. includes moderation	.59	.31
9. shows self sacrifice	.77	
10. is a person with courtesy	.70	.32
11. includes obedient manners	.59	
12. is humanity	.38	.52
Eigenvalue	4.05	1.72
Percentage of data-set variance	33.8	14.3
Reliability (all items) Alpha =	.79	.77
	(N=125)	(N=129)
Correlations > 0.3 with any factors	F1 & F2 (.31)	

(F: Factor; N: Number of the responses)
(-: no reliability > .70; no correlations > .30 with other factors)

CE: *junzi*	F1	F2	F3
1. is a virtue	.38	-.81	
2. includes a sense of morality	.37	-.90	.30
3. is gentleman-like behaviour	.35	-.71	
4. is reciprocal harmony with others	.67	-.35	.39
5. shows kind-heartedness	.70	-.44	.51
6. filial piety is one aspect of this	.60	-.30	.54
7. is propriety	.85	-.39	
8. includes moderation	.81		
9. shows self sacrifice			.84
10. is a person with courtesy	.66	-.39	.38
11. includes obedient manners	.35		.80
12. is humanity	.33	-.46	.62
Eigenvalue	4.77	1.49	1.13
Percentage of data-set variance	39.8	12.5	9.5
Reliability (all items) Alpha =	.83	.83	.80
	(N=137)	(N=138)	(N=139)
Correlations > 0.3 with any factors	F1 & F2 (-.42) F1 & F3 (.36)		

(F: Factor; N: Number of the responses)

Appendix I (Continued): Detailed information of the CE and BM groups' factors of the six cultural keywords

BM: ren	F1	F2	F3	F4	F5
1. is a virtue	-.32			-.31	.81
2. includes a sense of morality					.83
3. is gentleman-like behaviour	-.40	.38	.65		
4. is reciprocal harmony with others			-.52	-.64	
5. shows kind-heartedness		.88			
6. filial piety is one aspect of this	.90				
7. is propriety				-.87	
8. includes moderation	.89				
9. shows self sacrifice		.81			
10. is a person with courtesy		.50		-.79	
11. includes obedient manners	.56	.46		-.42	
12. is humanity			.88		
Eigenvalue	2.91	2.59	1.85	1.17	1.15
Percentage of data-set variance	24.3	21.6	15.5	9.8	9.6
Reliability (all items) Alpha =	.87 (N=14)	.71 (N=22)	-	.70 (N=17)	-
Correlations > 0.3 with any factors	-	-	-	-	-

(F: Factor; N: Number of the responses)
(-: no reliability > .70; no correlations > .30 with other factors)

BM: li	F1	F2	F3	F4
1. is a virtue	.57	.38		.50
2. includes a sense of morality	.73	.70		
3. is gentleman-like behaviour	.93			
4. is reciprocal harmony with others				.96
5. shows kind-heartedness			.81	
6. filial piety is one aspect of this	.85			
7. is propriety	.63		-.44	.46
8. includes moderation	.81			.44
9. shows self sacrifice		.83		
10. is a person with courtesy		.77		-.38*
11. includes obedient manners	.88			.40
12. is humanity	.32		.85	
Eigenvalue	4.75	2.33	1.56	1.04
Percentage of data-set variance	39.6	19.4	13.1	8.7
Reliability (all items) Alpha =	.87 (N=14)	-	-	.70[3] (N=14)
Correlations > 0.3 with any factors	-	-	-	-

(F: Factor; N: Number of the responses)
(-: no reliability > .70; no correlations > .30 with other factors)

[3] The reliability can be as high as .79 (N=14) when the item 10 was deleted.

Appendix I (Continued): Detailed information of the CE and BM groups' factors of the six cultural keywords

BM: xiao	F1	F2	F3
1. is a virtue		.63	
2. includes a sense of morality		.87	
3. is gentleman-like behaviour	.84		
4. is reciprocal harmony with others	.59		
5. shows kind-heartedness			.86
6. filial piety is one aspect of this		.77	
7. is propriety			
8. includes moderation		-.60	.45
9. shows self sacrifice	.88		
10. is a person with courtesy		-.31	.81
11. includes obedient manners	.75	.38	.40*
12. is humanity	-.87		
Eigenvalue	3.97	2.46	1.95
Percentage of data-set variance	33.1	20.5	16.3
Reliability (all items) Alpha =	.85 (N=18)	-	-[4]
Correlations > 0.3 with any factors	-	-	-

(F: Factor; N: Number of the responses)
(-: no reliability > .70; no correlations > .30 with other factors)

BM: de	F1	F2	F3
1. is a virtue		.87	
2. includes a sense of morality		.89	
3. is gentleman-like behaviour	.68		-.55
4. is reciprocal harmony with others	.83		
5. shows kind-heartedness	.77		
6. filial piety is one aspect of this	.56	.62*	
7. is propriety			-.81
8. includes moderation	.78		-.38
9. shows self sacrifice	.78		-.55
10. is a person with courtesy	.36		-.72
11. includes obedient manners			-.89
12. is humanity		.35*	-.61
Eigenvalue	4.38	2.39	1.59
Percentage of data-set variance	36.6	20.0	13.3
Reliability (all items) Alpha =	.80 (N=21)	-[5]	.84 (N=22)
Correlations > 0.3 with any factors	-	-	-

(F: Factor; N: Number of the responses)
(-: no reliability > .70; no correlations > .30 with other factors)

[4] If the item 11 was deleted, then the reliability can reach .70 (N=18).
[5] If items 6 and 12 were deleted, reliability (alpha) will be .84 (N=27).

Appendix I (Continued): Detailed information of the CE and BM groups' factors of the six cultural keywords

BM: he	F1	F2	F3	F4	F5
1. is a virtue	.87		-.43	-.39	
2. includes a sense of morality	.83		-.31	-.33	-.40
3. is gentleman-like behaviour	.44		-.86	-.51	
4. is reciprocal harmony with others		.82			-.46
5. shows kind-heartedness	.37		-.92		
6. filial piety is one aspect of this	.84		-.36		
7. is propriety				-.87	
8. includes moderation		.91			
9. shows self sacrifice		.32		-.44	-.81
10. is a person with courtesy			-.64	-.43	-.63
11. includes obedient manners		.37	-.31	-.77	-.35
12. is humanity			-.39		-.90
Eigenvalue	4.53	2.06	1.37	1.22	1.10
Percentage of data-set variance	37.8	17.2	11.5	10.2	9.2
Reliability (all items) Alpha =	.85 (N=21)	.77 (N=25)	.84 (N=21)	.80 (N=20)	.77 (N=24)
Correlations > 0.3 with any factors	-	-	-	-	-

(F: Factor; N: Number of the responses)
(-: no reliability > .70; no correlations > .30 with other factors)

BM: junzi	F1	F2	F3	F4
1. is a virtue	.34	.85		.50
2. includes a sense of morality	33	.89		.43
3. is gentleman-like behaviour			.96	
4. is reciprocal harmony with others	.45	.46		.79
5. shows kind-heartedness	.76	.38	.46	.45
6. filial piety is one aspect of this	.31	.39		.94
7. is propriety	.89	.32		
8. includes moderation	.82	.38		.59
9. shows self sacrifice		.57	.63	.79
10. is a person with courtesy	.47	.76	.57	
11. includes obedient manners		.74	.30	.39
12. is humanity	.55	.55		.34
Eigenvalue	5.66	1.87	1.24	1.01
Percentage of data-set variance	47.2	15.7	10.3	8.5
Reliability (all items) Alpha =	.89 (N=17)	.88 (N=17)	.72 (N=20)	.86 (N=18)
Correlations > 0.3 with any factors	F2 & F4 (.43)			

(F: Factor; N: Number of the responses)
(-: no reliability > .70; no correlations > .30 with other factors)