Chapter 1 Introduction

1. 1 Rationale for the Present Research

Several factors have contributed to the present inquiry into the problem of lexical near-synonyms. Initially this research was an outcome of a growing personal interest in the process of compiling AnEnglish-Chinese Intermediate Explicit Dictionary. The dictionary was one of some important projects of integrating learning, researching and compiling of the Center for Lexicographical Studies in Guangdong University of Foreign Studies. As a chief member of the compilers, the author has been responsible for writing the part of near-synonyms discrimination. During the three years of preparations and compilation (2001-2004), the author consulted and referred to a number of dictionaries concerning the discrimination of near-synonyms. In particular, he contrasted and analyzed the practices of some mainstream dictionaries of English as a foreign language (EFL) both at home and abroad dealing with the problem of discriminating nearsynonyms, which triggered his interest in this research field. After completing the compilation of more than 500 entries of English nearsynonyms discrimination, the author benefited a lot from the dictionary compilation practice and gradually felt it natural and necessary to have a deep and systematic study of the lexical near-synonyms, especially the discrimination of near-synonyms in the English Dictionaries for Chinese EFL learners.

Another factor motivating the present study is the difficulty for most Chinese EFL learners in the acquisition of English near-synonyms. With the development of human cognition into the objective world, most languages in the world are abundant in lexical synonyms or near-synonyms, and the languages of English and Chinese are especially characterized by their resourceful near-synonyms. We can say an active and comprehensive mastery of the vocabulary of a language, whether it is a speaker's native language or a foreign one, manifests itself in the semantic precision in diction in the learner's speaking and writing ability. For the differences between languages, quite a few English near-synonyms share the same equivalent in the target language of Chinese. In reality, a majority of foreign language learners were or are being frustrated by the incorrect and inappropriate lexical selection of rich near-synonyms during the process of their second language acquisition and learning. Pitifully, when they turn to the philological dictionaries for information about the discrimination of the related near-synonyms with the same equivalent, they are often disappointed to find that most dictionaries fail to contain such information. If any, such information is often a bit vague and confusing or not sufficient to help the learners to make proper and correct lexical choice. The learning and acquisition of near-synonyms is both an important part and a difficult element.

As early as the 19th century, one of Dean Trench's criticisms in his paper On Some Deficiencies in Our English Dictionaries was the scant attention given to "distinguishing of synonymous words". He called for the discrimination of synonyms "likely to be confounded", such as safe and secure (Landau, 2001: 134). In accordance with the new tendency of modern lexicography, the traditional lexicographic

definition approach by means of synonyms has been denounced and thus abandoned gradually for the failure to reveal the delicate distinctions between the definiendum and the definiens or for the violation of circular definition. With the production of the new learners' dictionaries in the 1990s, most lexicographers have come to pay attention to the addition of information about discriminating near-synonyms in the monolingual or bilingual learners' dictionaries for the sake of users' perspective and for the purpose of improving the efficiency of the learners' dictionaries. But it is a pity that in most learners' dictionaries, especially in the bilingual learners' dictionaries, there are still all kinds of problems and deficiencies. So this research is motivated by the necessity of re-examining the language item of lexical near-synonymy in the perspective of cognitive linguistics after integrating the previous etymological, lexicological, rhetoric and semantic studies of near-synonyms and the desire to propose a new approach to solve the problem of processing near-synonym information in the English and Chinese bilingual learners' dictionaries on the basis of contrasting some present mainstream English learners' dictionaries (ELD).

1. 2 Overview of Lexical Near-synonyms Research

Traditionally, though lexical synonymy is one of the fundamental linguistic phenomena that influences the internal structure of the lexicon, it has been given far less attention in linguistics, psychology, lexicography, semantics, and the computational linguistics than the equally fundamental and much-studied polysemy. Many scholars have made various significant studies about polysemy and some important findings have been made. In contrast, lexical synonymy has seemed to be the Cinderella and has been neglected in the eyes of linguists. Existing

near-synonyms studies can be roughly divided into five areas: 1) the origin and motivation of near-synonyms; 2) the criterion of defining the near-synonyms; 3) the method of determining the near-synonyms; 4) the dimensions of discriminating near-synonyms; 5) the treatment of near-synonyms in dictionaries.

The first problem is widely covered in literature, because it is the basis of near-synonym studies. Traditional scholars have found that near-synonyms are rich in most languages and they have agreed that near-synonyms have come into existence on account of the coordinating development of the human cognition and the language itself (Anglin, 1970; Lyons, 1977; Palmer, 1981; Bauer, 1983; Cruse, 1985; Liu, 1986; Zhang, 1990). But one important question remains unanswered in the previous literature: what is the relationship between the near-synonyms and human cognition?

The second topic is most theoretically controversial in literature. Different scholars have proposed different criteria of defining synonyms or near-synonyms. The first view is that near-synonyms are words with the same or similar meaning (Lehrer & Adrienne, 1974; Bolinger, 1975; Lyons, 1977; Cruse, 1986; Huang, 1997; Ge, 1985; Zhang, 1990 etc.). The second view is that near-synonyms are words referring to the same concept with minor nuances (Nelson, 1985; Taylor, 1989; Shi, 1992; Chen, 1994). Another view is that near-synonyms are words with the same reference (Liu, 1985; Chi, 1998). The last view is that near-synonyms are words with the same semantic components (Nida, 1975; Goddard, 1998; Liu, 1987, 1995; Zhou, 1990; Zhang, 1990). The real situation may be more complicated than what the four views describe. We think it better to combine all the views in judging the criteria of near-synonyms.

The third concern is the method of determining near-synonyms. The commonest method is inter-substitution. If one word in a

given context can be replaced by another word without changing the original meaning, the two words can be considered to be near-synonyms (Cruse, 1986; Fu, 1985; Hu, 1995). Another method is called semantic component analysis (Nida, 1975; Goddard, 1998; Liu, 1987; 1995; Zhou, 1990). In addition Liu proposed a method of combination, by which two near-synonyms are required to have the same reference when they are combined with another new word. In determining the near-synonyms for EFL learners, we can add another supplementary criterion that near-synonyms are words with the same equivalent.

As far as the dimensions of discriminating near-synonyms are concerned, there are great discrepancies in the number of such dimensions ranging from three to nineteen. According to Gove (1968), near-synonyms may have distinctions in implications, connotations and applications. Bauer (1983) puts forward three dimensions of denotation, connotation and application. Although their concrete ideas are different, most scholars advocated four dimensions of discriminating near-synonyms (Cruse, 1986; Hovy, 1988; DiMarco, Hirst and Stede, 1993 etc.). The four dimensions of Cruse include propositional meaning, expressive meaning, stylistic meaning, and presupposed meaning. There are some other people who stick to multiple dimensions (Lin, 1990; Wang, 2001). We think a more scientific and systematic classification of the dimensions of discriminating near-synonyms is necessary and significant.

Last but not least, researchers have discussed the treatment of near-synonyms in dictionaries at odds and ends. Egan (1968) made a complete survey of the history of English synonyms dictionaries before 1930s and summarized and commented the practice of traditional near-synonyms dictionaries. Some scholars discussed some aspects of compiling special dictionaries of near-synonyms (Zhang, 1980; Apres-

jan, 2000; Wang, 2001). In addition, Harvey and Yuill (1994) found in their empirical studies that searches for near-synonyms accounted for over 10 percent of dictionary consultations when learners were engaged in a writing task. However, given the rarity of absolute lexical synonymy, learners also need to know which of the particular near-synonyms given by the diction-aries and thesauruses is the most suitable for any given context. Harvey and Yuill (1994) also reported that, in over 36 percent of near-synonym searches, learners reported that the entry did not give them the information they needed.

To sum up, for a long time, lexical synonymy has been studied from different perspectives and in different approaches. But the previous theoretical studies of near-synonyms have been confined only in some specific aspects of near-synonyms in the etymological, lexicological, semantic and rhetoric levels. On one hand, some important findings have been made concerning the nature and property of lexical synonyms. On the other hand, it should be pointed out that the previous studies fail to explain reasonably and sufficiently the mechanism of the generation and multiplication of near-synonyms in combination with the human cognitive perception. Some concepts about near-synonyms are ambiguous and controversial. Furthermore, just owing to the fact that different lexicographers have different criterion to judge synonyms or near-synonyms, traditional lexicographers have based their views on their lexicographical experience or intuition and have made different treatments of near-synonym information both in monolingual and bilingual learners' dictionaries. Therefore such research methodology is problematic and such results are far from being systematic and convincing. In addition, the empirical study of near-synonyms information in the EFLD has not been carried out. What factors affect the treatment of near-synonyms information in English dictionaries for Chinese EFL learners? At present, the issue of how to integrate

relevant new cognitive linguistic theories and modern dictionary technologies into the discrimination of near-synonyms deserves further study.

1. 3 Research Objectives

Lexical near-synonyms are abundant and complex in most languages, especially in English and in Chinese. The learning and mastery of near-synonyms are very important for the learners' lexical competence and also a bit difficult for most foreign language learners. Therefore a systematic and comprehensive study of near-synonyms should be quite necessary and significant. In this research, more attention will be paid to near-synonyms information in English dictionaries for Chinese EFL learners. Taking into consideration the specific reference needs for Chinese EFL learners and the negative transfer of L1 in L2 vocabulary acquisition, we apply the findings of semantic and lexicological and cognitive studies of near-synonyms in compiling English-Chinese bilingual learners' dictionaries.

The main objectives of the present study are as follows:

- (1) To propose a new and better understanding and explanation of the motivation and generation mechanism of the near-synonyms in the light of cognitive linguistics.
- (2) To reclassify the differences between near-synonyms on the cognitive, expressive, stylistic, and structural dimensions.
- (3) To compare and contrast the lexical near-synonyms in English and Chinese at the etymological, morphological and semantic levels.
- (4) To explore and describe a new model of processing near-synonyms based on the cognitive semantic frames (CSF) in the EFLD.

1. 4 Research Methodology

The whole research has been developed within the theoretical framework of cognitive linguistics. There are not only theoretical discussions about the lexical near-synonyms but also tentative explorations for the practice of dictionary compilation. The chief research methods adopted include theoretical integration, quantitative survey and qualitative analysis. The lexical synonymy has been dealt with in many linguistic disciplines and in different approaches for a long history. The present research first integrates all relevant studies concerning the lexicological, rhetorical, semantic and corpus-based studies of lexical near-synonyms before re-examining the phenomenon of lexical near-synonyms in the perspective of cognitive linguistics. When contrasting the practices of processing near-synonym information in the mainstream learners' dictionaries, a quantitative survey is made concerning the total number of near-synonym series, the proportion of nouns, verbs and adjectives in all the near-synonyms, and the number of near-synonyms in each series and so on. The qualitative analysis in this research is mainly used for the description of near-synonyms in the cognitive semantic frame as well as the explanation of some lexical near-synonyms and the contrastive analysis of near-synonyms in English and Chinese languages.

1. 5 Research Framework

The key theoretical framework of the present study is that discrimination of near-synonyms is a special genre of cognitive semantic frame. The premise is based on the following contentions. Firstly near-synonyms are resulted from the constant human explorations into the objective world. With the rapid development of science, technology, economy and culture, near-synonyms in most natural languages have multiplied to describe and express the human complex and delicate physical and mental activities. This assumption can be justified by the fact that there are much more resourceful near-synonyms in the cognitive field closely connected with human life. In contrast, there is no near-synonym or even a lexical gap for some other unknown or untouched cognitive fields (Li, 2005). Secondly, near-synonyms are the products of the human categorization and sub-categorization (Ungerer & Schimid, 2001; Cruse, 2001). Most near-synonyms exist in the basic and subordinate levels according to categories on three levels in experiential hierarchies. Thirdly, the prototype theory accounts for the typical representation of near-synonym series. The prototype often has the most essential attributes and general values and other near-synonyms belong to peripheral or boundary members according to their semantic distance from the prototype. The relationship between near-synonyms and other category members forms the conceptual structure. Near-synonyms usually cannot stand alone. With the purpose of discriminating near-synonyms, it is necessary to get well known to the related cognitive semantic frame (CSF).

Several puzzling contradictions have to be smoothed away in the processing of near-synonyms in the English dictionaries for Chinese EFL learners. The CSF-based approach provides a feasible and practical guidance in getting rid of these problems. Firstly, it appropriately stipulates the criterion by which near-synonyms can be selected as an entry of near-synonyms to be discriminated in EFL. Near-synonyms in the same entry should belong to the same cognitive semantic categories. They must have the same part of speech and grammatical form. Taking

into account the special cognitive needs for the Chinese EFL learners, we can add English near-synonyms with the same equivalent as a supplementary criterion. Secondly, sets of attributes and values help to determine the sequence of near-synonyms within the entry. Near-synonyms have to be rearranged in accordance with their reciprocal semantic distance. Thirdly, the prototype model in the frame determines the selection of the dominant in the near-synonyms entry. The dominant is the most typical and frequently-used word in the series. Finally, dictionary readers' different cognitive models and cognitive needs account for the granularity and multi-dimensions of discrimination of near-synonyms.

1. 6 Organization of This Research

The whole research consists of eight chapters. Chapter 1 is an introduction to the background, research questions, framework and methodology and Chapter 2 is a literature review of previous linguistic studies about lexical near-synonyms. It will be seen that lexical synonymy is a most fundamental linguistic phenomenon that has been studied in different disciplines and in different approaches. The previous studies are mainly delimited in the etymological, lexicological, semantic and rhetoric levels.

Chapter 3 is used first to review the history of special English synonym dictionaries and the development of the philological dictionaries with synonym information, and then to investigate the conventional treatments of near-synonyms in the mainstream English learners' dictionaries. In particular, the number of near-synonym series, contents of discrimination, structure and their insufficiencies in the four typical ELD are contrasted and analyzed.

Chapter 4 presents a new approach to deal with the phenomenon of lexical near-synonyms. It is a theoretical framework that points out that the motivation and abundance of lexical near-synonyms are closely related with the development of human cognitive activities. Cognitive theories of categorization, idealized cognitive model (ICM), prototype and family resemblance are employed to explain the motivation and generation mechanism of lexical near-synonyms.

Chapter 5 illustrates the differences between near-synonyms in the cognitive, expressive, stylistic and structural levels. Each level is reclassified into more detailed dimensions. In the perspective of cognitive needs, near-synonyms can be discriminated from multi-dimensions.

Chapter 6 is formed from an overview of the cross-linguistic contrast between the near-synonyms in English and Chinese languages. There are some similarities and variations in etymological, morphological, semantic and cultural levels concerning the near-synonyms in English and Chinese. This analysis aims at exposing some special difficulties for the Chinese learners in the acquisition of English near-synonyms.

Chapter 7 is perhaps the most important part in this research. It puts forward a new practice of discriminating near-synonym series in the cognitive semantic frames (CSF). It aims to bridge the gap between the cognitive semantic studies and lexicography. Issues to be discussed involve some puzzling technical problems in the compilation of EFLD, including the construction of the semantic frame of near-synonyms, determination of near-synonym entries, selection of the dominant of the near-synonym series, the psychologically salient equivalents of the near-synonyms, the granularity and multidimensional model of differentiating near-synonyms in the English dictionaries for Chinese EFL learners.

Chapter 8 concludes the thesis by providing some significant findings, implications and new directions for future research.

Chapter 2 Linguistic Approaches to Near-synonyms

2. 1 Introduction

Lexical synonymy as a kind of linguistic phenomenon exists in almost all the languages in the world. Since the word is the principal carrier of language meaning, the study of word meaning was the main target of traditional semantics and structural semantics. Now the lexical semantics has become an independent subject, which is concerned with the study of the nature, structure and relations of lexical meaning. Lexical synonymy is a common and fundamental sense relation which influences the lexicon along with other lexical relations such as hyponymy, antonymy and metonymy. For a long time the lexical synonymy has been studied in different disciplines. It is undeniable that some important and significant findings have been made. However, the previous researches were usually delimited within some theoretical discussions about the definition, standard, scope of synonyms or near-synonyms and their discrimination dimensions. Therefore in this dissertation we think it is necessary to inspect and integrate the conventional approaches to the lexical near-synonyms.

2. 2 Some Fundamental Concepts to Be Clarified

2. 2. 1 Words and Concepts

The word is the smallest linguistic unit that can occur on its own in speech or writing. Although this definition can be hardly applied consistently, there is evidence that native speakers of a language tend to agree on what are the words of their language. In writing, words boundaries are usually recognized by the space between the words. In speech, word boundaries may be identified by slight pauses. Words are relatively the most stable of all linguistic units, in respect of their internal structure. The constituent parts of a complex word have little potential for rearrangement, compared with the relative positional mobility of the constituents of sentences in the hierarchy. So Leonard Bloomfield (1953) advocated treating sentences as "the maximum free form" and the word "the minimum free form". The vocabulary of a language is not just a list of words. They are listed alphabetically in dictionaries and in inventories just for the sake of learners beginning to learn a language. But the apparent simplicity of alphabetic ordering conceals complexities in our definition of a "word", in the meanings carried by and between lexical items and in the morphological, syntactic and phonological properties of those items.

The concept is the general idea or meaning that is associated with a word or symbol in a person's mind. Concepts are one of the most basic ingredients of thought. They are categories of objects, events, or ideas with common properties (cf. Bernstein *et al.* 1994). Concepts are vital to the efficient functioning of human cognition. They are organized bundles of stored knowledge which represent an articulation

of events, entities, situations and so on in our experience. If we were not able to assign aspects of our experience to stable categories, it would remain disorganized chaos. We would not be able to learn from it because each experience would be unique. It is only because we can put similar (but not identical) elements of experience into categories that we can recognize them as having happened before, and we can access stored knowledge about them. Furthermore, shared categories are prerequisite to communicate. Faced with the variety of phenomena and events happening in the world, people have to engage in a large amount of categorization in order to reduce the great diversity of the world into manageable proportions. Concepts are important to human thought because they allow people to relate each object or event they encounter to a category that is already known. Linguists believe all languages can express the same concepts, although some languages may have fewer names for some concepts than other languages, or may distinguish between concepts differently. Here we will follow the WordNet view of how words and concepts are related. Words express concepts. A concept is represented by a set of synonyms that can be used to express that concept (Fellbaum, 1998). The mapping between word forms and concepts is of the many-many type; the members of a set of synonyms represent different ways to express the concept, while one word form can be related to several concepts (Miller et al., 1990).

2. 2. 2 Synonymy, Synonyms and Near-synonyms

2. 2. 2. 1 Synonymy

Terminologically, the relations of synonymy in natural languages may be assumed to characterize the words or larger linguistic units (phrases, clauses, sentences and texts), which have identical meanings with other words, phrases, clauses and texts, differing in their forms. This broad sense of synonymy embraces the traditional synonyms with their inter-lexical identity relations, as well as different types of paraphrase, i. e. inter-clausal/sentential/textual pairs. The narrower, classical sense of synonymy is limited to the identity of meaning only between words. The identity of meaning between single words is frequently referred to as the synthetic synonymy as opposed to the analytical type, including the so-called "paradigmatic synonym pairs", such as the definiendum and the corresponding definiens (Linsky, 1967). It must be clearly pointed out that syno-nymy in this research is narrowed down to refer to the identity of lexical words.

Defining synonymy has proved to be very difficult. If one takes the view that synonyms are words that have the exact same meaning, it can be argued that synonyms do not and even cannot exist in any language. But if one relaxes this view to include words that are merely similar in meaning, then too many words can be considered as synonyms at some level of sense granularity. Yet, in accordance to this view, synonymy can also be seen as so fundamental to a language that it influences the very structure of its vocabulary. This apparent paradox of synonymy — that synonymy is at the same time both impossible and fundamental in language — gives rise to different kinds as well as different degrees of synonyms.

2. 2. 2. 2 Synonyms

In their attempts to understand meaning and truth, philosophers have focused on synonymy as absolute synonyms. Synonyms can be verified by the standard of interchangeability in all possible contexts without changing meaning, however they define "meaning". Quine (1951), for instance, considers several such definitions including in-

terchangeability without change of truth-value of the sentence and interchangeability without affecting the set of logical entailments of the sentence, but finds all such definitions problematic because of circularities resulting from the interrelated notions of meaning, synonymy and truth. At the same time Quine argues that, in order to say that interchanging a word with its putative synonym in an expression does not change the meaning of the expression, one must have some way of specifying that the before and after expressions have the same meaning (or truth value, or whatever), and the only way to do this is to reduce one expression to the other by interchanging synonyms. Goodman (1952) instead argues that synonymy is impossible by using an equivalence of extension of definition. He claims that for any terms P and Q one can always form the explicitly contrasting statement "a P which is not a Q". Goodman's conclusion relies on the idea that no two words can have the same extension, because one can always find a context in which two putative synonyms are not synonymous. However, even if we assume that absolute synonymy is possible, pragmatic and empirical arguments show that it is very rare. Cruse (1986: 270) says that "natural languages abhor absolute synonyms just as nature abhors a vacuum", because the meanings of words are constantly changing. More formally, Clark (1992) employs her principle of contrast that "every two forms contrast in meaning", to show that language works to eliminate absolute synonyms. With the change and development of vocabulary, either an absolute synonym would fall into disuse or it would take on a new nuance of meaning. For example, there was an Anglo-Saxon word "animal" in the Old English. Later, the Latin word "deer" and the French word "beast", which had the same meaning as the Anglo-Saxon word "animal", were assimilated into the English language. With the development of English language, the lexical meaning of the word "deer" and

"beast" changed greatly.

2. 2. 2. 3 Near-synonyms

In some extent, absolute synonymy is just like a red herring for us. In real situations of language use, there are usually several words to choose from that are nearly absolute synonyms, where a different choice would make a difference, however slight, in the overall expression. For us these are the more important kinds of synonyms called "near-synonyms".

Near-synonyms are pervasive. In fact, every dictionary of synonyms actually contains only near-synonyms, a fact made obvious by those dictionaries that explicitly discriminate between synonyms. Lexicographers clearly take the view that synonymy is a matter of degree. Spark (1986) argues that only by defining synonymy as likeness of use in context can one come up with a workable definition. Hence, for her, if two or more words are interchangeable in a particular context without changing the "ploy" (a primitive and intuitive notion representing meaning, application and form of a sentence), those word-uses are synonymous. The same words need not to be interchangeable in any other context. For example:

- 2. 1a. "You'll stay right here", commanded Bill Doolin, covering Red with his rifle.
- 2. 1b. "You'll stay right here", ordered Bill Doolin, covering Red with his rifle.
- 2. 2a. The doctor often ordered his patients to get plenty of rest.
- 2. 2b. The doctor often *commanded* his patients to get plenty of rest.

We can see that interchanging *command* and *order* in sentences 2. 1a and 2. 1b has only a very subtle effect on the meaning of the sentence. But consider sentences 2. 2a and 2. 2b, in which interchanging