

**DENOMINAL VERBS IN ENGLISH AND MANDARIN FROM A
COGNITIVE PERSPECTIVE**

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FACULTY OF LANGUAGES AND LINGUISTICS

UNIVERSITY OF MALAYA

KUALA LUMPUR

2014

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COGNITIVE PERSPECTIVE**

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**DISSERTATION SUBMITTED IN FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF
LINGUISTICS**

FACULTY OF LANGUAGES AND LINGUISTICS

UNIVERSITY OF MALAYA

KUALA LUMPUR

2014

UNIVERSITY OF MALAYA

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DENOMINAL VERBS IN ENGLISH AND MANDARIN FROM A
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ABSTRACT

A linguistic phenomenon of denominal verbs is pervasive in both English and Mandarin. Many Chinese and foreign linguists have illustrated or analyzed this phenomenon. However, most of the previous research has explored the motivation of denominal verbs from semantic, syntactic or pragmatic perspectives. In order to look into the phenomenon, this study adopts a cognitive perspective to probe the phenomenon, arguing that denominal verbs are the product of certain construal operations, and that the semantic meanings of denominal verbs are dynamic, open, and based on the specific linguistic environment. Data in this research mainly come from relevant literature, dictionary and newspaper. Other public internet sources are also used in this study.

From the comparison and analysis of English and Mandarin data, we find that the general distribution of the major kinds of metonymic denominal verbs in English is in consistency with that in Mandarin, and the mechanism of English metaphoric denominal verbs is also similar with that of Mandarin ones. However, due to the influence of cultural elements and different ways of thinking, many discrepancies also exist among English and Mandarin denominal verbs.

This study has also supported the two basic tenets in cognitive linguistics: meaning is mental entities in conceptual space, and the conceptual structure of meaning is embodied and motivated by usages: the content of the conceptual structure draws upon an open-ended and encyclopedic knowledge.

Key words: denominal verbs, cognitive grammar, metaphor and metonymy

ABSTRAK

Kata kerja denominal (kata nama yang digunakan sebagai kata kerja) adalah satu fenomena linguistik yang menarik dan sangat ketara dalam Bahasa Inggeris dan Mandarin. Ramai ahli bahasa Cina dan asing telah menganalisis dan menggambarkan fenomena ini. Walau bagaimanapun, kebanyakan kajian terdahulu hanya tertumpu kepada kata kerja denominal daripada perspektif semantik, sintaksis atau pragmatik. Untuk mengkaji fenomena terbabit, kajian ini menggunakan perspektif kognitif untuk menyiasat fenomena, dengan hujah bahawa kata kerja denominal merupakan hasil daripada operasi tafsiran tertentu, dan makna semantik kata kerja denominal adalah dinamik, terbuka, dan berdasarkan kepada keadaan linguistik yang spesifik. Data untuk kajian ini adalah dari kesusasteraan yang relevan, kamus dan akhbar. Sumber-sumber internet juga digunakan dalam kajian ini.

Berdasarkan perbandingan dan analisis data dalam bahasa Inggeris dan Mandarin, kami mendapati bahawa pembahagian bagi jenis kata kerja denominal metonimi dalam bahasa Inggeris adalah konsisten dengan yang terdapat dalam bahasa Mandarin, dan mekanisme metafora bahasa Inggeris kata kerja denominal juga sama dengan bahasa Mandarin. Walau bagaimanapun, disebabkan pengaruh unsur-unsur budaya dan cara pemikiran, banyak perbezaan yang wujud antara kata kerja denominal Bahasa Inggeris dan Mandarin.

Kajian ini juga menyokong dua prinsip asas dalam tatabahasa kognitif: maksud adalah entiti mental dalam ruang konsep, dan struktur konsep maksud termaktub dan didorong oleh kelaziman: kandungan struktur konsep dapat menarik pengetahuan yang lebih terbuka dan menyeluruh.

Kata kunci: kata kerja denominal, tatabahasa kognitif, metafora dan metonimi

ACKNOWLEDGMENTS

I am deeply indebted to a number of people who have guided and supported me in many ways through the evolution of thought that has resulted in this dissertation.

This work owes a great intellectual debt to my supervisor, Associate Professor Dr. Toshiko Yamaguchi, whose lectures revealed to me the charm of cognitive linguistics ever since the first semester in my ML program. Her unfailing encouragement, enlightening suggestions and consistent help have always been the driving force at various stages along the completion of the dissertation. Furthermore, the benefit that I have gained from her profound knowledge, remarkable expertise and intellectual ingenuity will be of everlasting significance to my future research.

I would like to thank a group of distinguished professors at University of Malaya whose intellectually informative lectures and seminars inspired me a lot for the formation and writing of this dissertation.

I would also like to express my sincere thanks to the distinguished professors on the dissertation committee for their thought-provoking questions, inspiring suggestions, and critical comments on my dissertation.

My special thanks also extend to my fellow graduate friends for their inspiring suggestions. This work has also benefited a lot from the discussions with my fellow graduates at UM.

Moreover, I owe all my heartfelt thanks to my dear parents for their love, support, understanding and devotion which are critical factors in providing me the persistence to complete this work.

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LIST OF ABBREVIATIONS

ACC= accusative case
AP=aspectual particle
C=complement
DM= declarative mark
FW=function word;
GEN=genitive
MP=modal particle
MW=measure word
NEG=negative
PAM= perfect aspect mark
PM= position mark
SP=structural particle

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

Generally speaking, English has three kinds of word formations: derivation, compounding and conversion. Particularly, conversion is considered as one of the most productive ways of producing new words. As a process of word formation, noun-verb conversion (which is defined as denominal verbs in this dissertation) has been in use ever since the period of Old English and has become an extremely productive way of yielding new words in English. One important factor for the amount of English denominal verbs is that in the English language, there are much more nouns than verbs, 73.6% of the words in the English vocabulary are nouns while verbs account for only 8.6% (Wei, 2009). Furthermore, there is a trend of the predominance of nouns over verbs, because nouns often extend their functions to fill lexical gaps of verbs corresponding to the new nouns.

However, conversion is not a common way of forming new words in Mandarin and even less mentioned as a way of word formation in previous Mandarin literature about Mandarin lexicalization or word formation. In fact, many Mandarin words are used in two or more word classes without any obvious changes in form.

According to previous studies, it is known that both English and Mandarin converted words are somewhat similar in their usages and productive mechanisms. For this matter, they share the same linguistic phenomenon. Despite noun-verb conversion being defined with different terms in English and Mandarin, denominal verb will be employed to name noun-verb conversion in this dissertation.

1.2 State of the Problem

Previous studies concerning this issue are mainly from the perspective of syntactic analysis and semantic relationships. Description and explanation are insufficient in those studies. In modern linguistic study, we should describe the complicated variable linguistic phenomena to reveal the common rules on the one hand, and try to explain the motivation of these phenomena from different perspectives on the other hand. In conformity with these two goals, the problem addressed in this study is to explore the cognitive motivation of English and Mandarin denominal verbs and to illustrate the underlying mechanism in the cognitive process of this phenomenon.

1.3 Research Background

The final goal of linguistic research is to describe and explain linguistic competence of language users. And word class categorization is the starting point of language investigation. As a concept of lexical category, the notion of word class is widely accepted in modern linguistics. Many grammatical theories build their own grammatical models by using notions as noun, verb, and adjective as well as other word classes. Among these grammatical categories, nouns and verbs are basic and widespread in all kinds of languages. The *Collins English Dictionary* (2005) defines “noun” as a word or group of words that refers to a person, place or thing or any syntactically similar word. This definition consists of two parts: there is a semantic definition (nouns are defined in terms of what they mean) followed by a syntactic definition (nouns are defined in terms of their similar syntactic behavior). “Verb” is defined as a word which is used with a subject to say what someone or something does or what happens to them, or to give information about them. The segmentation between noun and verb makes one

phenomenon of linguistic emerged, namely, denominal verbs.

This research is to probe how nouns denoting entities can be used as verbs without affixation in English and Mandarin. These zero derived verbs that have come to be used as verbs from nouns are referred to as denominal verbs. Denominal verbs are pervasive in English and Mandarin, as in:

(1) She watered the flowers yesterday.

(2) They finally decided to honeymoon in Hawaii.

(3) John hammered a nail into the wall.

(4) Ian nailed the poster up

(5) 漆 门 窗

qī mén chuāng

paint doors windows

to paint doors and windows

(6) 圈 地

quān dì

enclose land

to enclose land

(7) 他 喜欢 在 春天 的 时候 网 鱼。

tā xǐ-huān zài chūn-tiān de shíhòii wǎng yú

he enjoy in spring of time net fish

He enjoys catching fish with net in the spring.

(8) 他 被那 商人 坑 了。

tā bèi nà shāng-rén kēng le.

he by that businessman hole AP

He was cheated by the businessman.

Aside from these conventional and established denominal verbs, relatively new ones are created quickly in English and Mandarin. One instance is the newly innovated but widely used verb “google”. This verb was caught in BBC news report in 15:33 GMT, 30 April, 2004 as in sentence 9:

(9) Google...is not only the valuable research tool; it has created a new verb “to google”.

In Mandarin, denominal verbs are also a commonplace phenomenon, such as in sentence (10):

(10) 咱 们 视 频。

zán-mén shìpín

we video

Let's use webcam to chat.

These observations convincingly prove the innovativeness of denominal verbs in two languages, and they should be given due attention of observation and research. On the one hand, many of these denominal verbs have entered the dictionaries as individual entries, i.e. they are lexicalized; therefore, denominalization is an important way to produce new words besides the combination of stems and affixes. On the other hand, some denominal verbs are lexical innovations. People easily create and comprehend denominal verbs that they have never heard or used before such as the examples of “google, facebook, 百度 bǎi dù Baidu (name of a search engine), and 视频 shìpín video”. Moreover, these verbs are produced and understood to a high level of

productivity. It is an area of language use where the interaction among form, meaning, context, and conceptualizer is exceptionally complex and fascinating. The ubiquity, productivity, innovativeness of denominal verbs is an interesting subject for investigation. The findings of this study will help enrich our understanding the creativity of human language as well as the human mind.

1.4 The Concept of Denominal Verbalization

1.4.1 Definitions of English Denominal Verbs

First of all, it is necessary to make clear the research object of this study of denominal verbs. The word of “denominal” is defined in the Merriam–Webster’s Collegiate Dictionary (2003) as words derived from a noun. Otto Jespersen (1942) claims that denominalization is “verbalization by zero suffixes”. According to Clark and Clark (1979), denominal verbs are nouns that have come to be viewed and used as verbs, and the nouns where verbs are derived from are called “parent nouns” (Clark and Clark, 1979). In accordance with the above definitions, Kelly (1998) regarded that denominal verbs are produced as a consequence of the extension of a noun into the verb class.

Nevertheless, the above statement is only a basic recognition, too broad and general for linguistic research. In *When Nouns Surface as Verbs*, Clark & Clark (1979) set up four criteria for the denominal verbs in their research to make their task manageable: (a) Every verb obliged to be formed from its parent noun without affixation; (b) The parent noun of each verb need to indicate palpable object or property of such an object; (c) Every verb should have a non-metaphorical concrete use as far as possible; (d) Each verb has to be available and useable as a genuine finite verb (Clark & Clark, 1979). Also, Clark & Clark (1979) present a classification of more than 1300

denominal verbs and sort them into nine different semantic categories, such as, LOCATUM VERBS, LOCATION VERBS, DURATION VERBS, AGENT VERBS, EXPERIENCER VERBS, GOAL VERBS, SOURCE VERBS, INSTRUMENT VERBS, MISCELLANEOUS VERBS.

In this dissertation, I prefer to adopt Clark & Clark's definition for denominal verbs as the criteria to delimit the English data. Because their reformatory denominal verb convention, with special consideration to pre-emption by homonymy, which denotes that a parent noun may not be denominalized if there appears a homonymous verb counterpart. And they also give a very specific classification of denominal verbs. These claims can help us to get a better understanding of the English denominal verbs.

1.4.2 Definitions of Mandarin Denominal Verbs

In Indo-European languages, the lexical inflection is highly-developed. The change of parts of speech is much more frequent than Mandarin Chinese. The criteria of dividing parts of speech depend on the criteria of word meaning, morphemical variation and grammatical function. Because of the highly-developed lexical inflection in Indo-European languages, the most important one is morpheme variation. However, the situation in Contemporary Mandarin is different. Contemporary Mandarin Chinese lacks lexical inflection.

Based on the Clark and Clark's theory of denominal Verbs, Chan and Tai (1995) explore how nouns indicating real objects may surface as transitive verbs in East Asian languages, especially focusing on the three types of Chinese dialects, namely, Mandarin, Cantonese and Taiwanese. They set four criteria for denominal verbs in Chinese, and enumerate four lists of corpora in Mandarin, Cantonese and Taiwanese: (i)

HOMOPHONOUS NOUN-VERB PAIRS; (ii) NOUN-VERB PAIRS WITH VERBS IN TONE 4; (iii) PAIRS OF NOUN-VERB WITH NOUNS IN TONE 4; (iv) NEAR HOMOPHONOUS NOUN-VERB PAIRS.

In comparison with Clark and Clark's categories, they classify the Mandarin corpora into four categories of denominal verbs, that is, Locum verbs; Location verbs; Goal verbs; and Instrumental verbs. Among these classifications, the rare common ones are Locatum verbs and Location verbs, then Goal verbs, with the universal being Instrumental verbs in contemporary Mandarin.

For the purpose of the present study and to make the data manageable, I have made a list of the following set of criteria put forward by Chan & Tai (1995) to limit the scope of denominal verbs in Mandarin to be investigated:

(a) The verbs have corresponding form of nouns which are homophonous (or at least nearly homophonous). And these verbs are taken as derivable from their matching nouns via the process of conversion or zero derivation (cf. Lyons (1977) and Sanders (1988)). But this does not always mean that all such kind of verbs is, in reality, historically come from their corresponding form of source nouns. They are utilizing this derivational process as an approach of involving these noun-verb pairs and as a heuristic theory to recognize assumed denominal verbs in Mandarin.

(b) The corresponding noun, regarded as the parent noun, has to make reference to palpable (i.e., visible or tangible) entities. However, unlike Clark & Clark, Chan & Tai, they consider the act denoted by denominal verbs which should involve the use of the object indicated by the parent noun in a non-metaphorical, concrete meaning. Therefore, excluded are such words like: 帶 d ài belt, extended to mean "to bring or to carry"; 跟

gēn heel, extended to mean “to follow”. But in this research, I do not exclude verbs which are converted from nouns and have primarily metaphorical meanings. My list of denominal verbs in modern Mandarin includes such parent noun as 本 běn, which means “root (of a plant)”, with the extended meaning of “to be based upon”.

(c) The denominal verb and the parent noun must have identical form, except for difference in tone, and in some rare cases, aspiration. That is to say word pairs such as 钉 dīng “a nail” and 钉 dìng “to nail”, 磨 mò “a millstone” and 磨 mó “to grind”, 囤 dùn “a grain bin” and 囤 tún “to store up, to hoard” are regarded as pairs of parent nouns and denominal verbs because of the identical form of each pair, although words in each pair are different in tone or aspiration.

(d) The parent noun of a denominal verb may be monosyllabic and identical with the verb (e.g. 冰 bīng “ice” / 冰 bīng “to ice”); it may be suffixed (e.g. 钉子 dīng-zi “nail”/ 钉 dìng “to nail”); or it may serve as the head of a nominal compound (e.g. 铐 kào in 手铐 shǒu-kào “handcuff”, 闩 shuān in 门闩 mén shuān “door latch”). However, this criterion excludes the -化 suffixation in Mandarin. This noun suffixation, for example, 机械化 jī-xiè-huà “to mechanize” from 机械 jī-xiè “machine”, is patterned after the “-ize” suffixation in English, and is distinct from the rest of the noun suffixations (-子 as in 梳子 and -儿 as in 把儿) in Mandarin.

The reasons why I use Chan & Tai (1995)’s definition for delimiting the mandarin denominal verbs are that their proposals grabbed the core features of Mandarin denominal verbs. One thing important among the definitions of Mandarin denominal verbs is that no change in the word form happens. Indeed, this can be treated as a basic rule for a noun’s denominalization. The noun from which the verb is converted is named

“parent noun”. The meanings of ordinary denominal verbs, it seems clear, bear at least an approximate relationship to their parent nouns. It is also the case that each parent noun entails some semantic components denoting actions.

In brief, to clarify the notion of denominal verbalization is quite important. It helps to grasp the distinctive features of denominal verbs and pave the way for our study on N-V conversion.

1.5 Objectives of the Research

The objectives of the present research are to probe English and Mandarin denominal verbs from the perspective of cognitive linguistics. To be more exact, the objectives of the present research are to explore the cognitive motivation of denominal verbs and the understanding mechanism in the cognitive process of them in both English and Mandarin languages.

1.6 Research Questions

Since this dissertation intends to examine similarities and differences of the producing and underlying mechanism in English and Mandarin denominal verbs, to fulfill this goal, we are supposed to solve the following several questions:

- (1) How does the operational mechanism of metonymy and metaphor work in producing and understanding of English and Mandarin denominal verbs?
- (2) What are the similarities and differences in English and Mandarin denominal verbs?
- (3) Which cognitive mechanisms are involved in English and Mandarin denominal verbs except metonymy and metaphor?

If all the above issues are reasonably handled, this research will gain a great

significance in the investigation of denominal verbs in English and Mandarin.

1.7 Significance of the Research

Denominal verbs stand for a most representative case of linguistic innovation, in which linguistic competence of syntactic, semantic, and pragmatic aspects are all involved. The majority of the previous studies on this topic are to a large extent characterized by a tendency to confine their range of attention to either simply syntactic or semantic side of linguistic system per se, or the aspect of speakers' performance. Due to their specific research perspectives these studies have inadequacies of different nature. The perspective of this study is a cognitive one, a perspective that looks into how the human mind processes to make the parent as a verb.

Furthermore, this study is intended to explore the similarities and differences of English and Mandarin denominal verbs. As we all know, English belongs to the Indo-European language system and Mandarin is a member in the Sino-Tibetan family, which indicates that the two languages may have totally opposite linguistic characteristics in many aspects. For example, the most salient characteristic of English syntax is hypotaxis, while that Mandarin syntax is parataxis. The coincidental thing is that we can find instances of denominalization in both English and Mandarin, two fundamentally different languages. From the view of previous studies (Chan & Tai, 1995; Kelly, 1998; Shichun, 1995) which have either focused on English denominal verbs or Mandarin ones, we have noticed that certain similarities and differences exist between English and Mandarin denominal verbs, but few efforts have been devoted to a comparative study between them. To make up for that deficiency, this study will try to find the similarities and differences between English and Mandarin denominal verbs

based upon data observation, and offer the reasons or motivations for them.

The comparative study of a linguistic phenomenon will shed light on the cross-cultural communication between English and Chinese cultures. Likewise, we hope the analysis and the comparative study will be helpful for foreign language teaching in China and Mandarin teaching in foreign countries. The realistic value lies in what the study help the language learners to understand the conversion between nouns and verbs much better after knowing the cognitive mechanisms.

1.8 The Structure of This Dissertation

This dissertation consists of five parts.

Chapter one makes a general introduction to denominal verbs and the present study. Information about denominal verbs, research problem, objectives, research questions, significance of the study, and the organization of the dissertation are presented.

Chapter two presents a literature review of the previous studies on English and Mandarin denominal verbs in which different approaches are discussed, and the achievements and limitations of the past researches are pointed out. The perspective of the present study is put forward.

Chapter three is an introduction of the theoretical framework of the present study. Conceptual metaphor and metonymy theory are treated as the theoretical foundation of current research. Apart from that, basic-level categories, profiling, summary and sequential scanning will be adopted to interpret English and Mandarin denominal verbs. Relevant concepts to be used will also be introduced in this part. And methodology and data sources of the study will be elaborated.

Chapter four is an essential part of this dissertation which creates a general

illustration and interpretation of metonymies in English and Mandarin denominal verbs, which is based on the data collected. Besides, a comparative study will be carried on in the framework of metonymy theory. Paralleled with understanding of metonymies in English and Mandarin denominal verbs, then the study concentrates on the application of metaphors in English and Mandarin denominal verbs. Based on data collection, metaphors in English and Mandarin denominal verbs will be arranged according to their amounts. Thus, the interpretation of some samples of denominal verbs in English and Mandarin is presented. Results in relations to research question 3, a further reconsiderations of English and Mandarin denominal verbs will be made by adopting other conceptual representations of cognitive linguistics, namely, basic-level categories, profiling and summary/sequential scanning in order to complement the interpretations of English and Mandarin denominal verbs.

Chapter five is a concluding part. The major findings of the present study will be summarized. The limitations and suggestions for further study will also be displayed.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter intends to provide an overview of the preceding studies on English and Mandarin denominal verbs. The studies of denominal verbs in the past few decades have surpassed previous studies in subtlety and sophistication, and there is a wealth of literature available. As a result, the previous studies on English and Mandarin denominal verbs from several perspectives will be displayed only partially. The limitations of each perspective will be presented, which will illuminate the current study. Therefore, this chapter is a basic preparation of this research.

2.2 Previous Studies on English and Mandarin Denominal Verbs

As a universal language innovation phenomenon which is pervasive in English and Mandarin, denominal verbs have been studied by many scholars from different perspectives, and great fruits have been gained in using denominal verbs to comprehend the innovative use of language (Clark & Clark, 1979; Aronoff, 1980; Kelly, 1998) as well as to achieve rhetorical effects (Clark & Clark, 1979; Genyuan, 1991; Shichun, 1995; Qun, 1998). The previous research has expounded denominal verbs mainly from the viewpoint of semantics (Clark & Clark, 1979; Quirk, 1985; Shenghuan, 2001), syntactic (Hale and Keyser, 1991), pragmatics (Aronoff, 1980; Clark and Clark, 1979), experimental research (Kelly, 1998) and rhetorical use. Although, a few studies have inquired into denominal verbs from the perspective of cognitive linguistics (Zhengguang, 2000; Dongmei, 2001), there is still more space to study it from cognitive linguistics.

In the following part, I will give a concise introduction of the previous studies of denominal verbs in English and Mandarin from various perspectives, namely, syntactic, semantic, pragmatic, rhetorical, experimental and cognitive.

2.2.1 Syntactic Perspective

Xing (2006) claims that Hale & Keyser's (1999) Lexical Argument Structure (LAS) is an influential hypothesis of verb derivation at present, and which entirely depend on the syntactic principles of head movement or head incorporation. They hold that word senses are crouched in the lexis of syntax, and that their characteristics follow from restraints which maintain in syntactic categories. As a matter of fact, in their opinion, senses of words are displayed by syntactic structures consistent with X-theory (even with a few added lexicon-specific constraints), and the inside syntax of words ("L-syntax") is correlated with their clausal syntax by syntactic tenets (Kiparsky, 1997). Therefore, Hale & Keyser (1991) discuss the noun to verb shift with a theoretical background of argument structure: GB theory holds that predicates demand a certain number of arguments, each argument allocated to a certain role, then a certain "case", and these properties projected without any change to syntaxes, with the argument roles referring to agents and objects, inner arguments allocated to objective cases and outer arguments subjective cases and nouns shifted to verbs acting as arguments as well, the semantic content of the verbs hidden in deep structures. Many inspirations are derived from their studies about the noun to verb shift, with argument structures bridging semantic contents and syntaxes.

2.2.2 Semantic Perspective

The study of English denominal verbs from semantic perspective can be traced

back to Jespersen (1942). He collected a lot of English denominal verbs, which he termed as “desubstantival verbs” and claims that such verbs express certain actions or states related to parent nouns. Viewed from the standpoint of structuralism, he did not explain the integral meaning relationship between them. Actually, Jespersen’s description about the denominal verbs is exposed to its semantic motivation, shedding new light on later researches. Since the 1960s and 1970s, the development of semantics has provided the research on noun to verb conversion with new impetus. It shows that the expressions derived from noun to verb conversion have its corresponding deeper semantic structures; therefore, verbs of this kind may be accounted for by derivation. For example, the deeper semantic content of nailing the note (to the door) is to cause a nail to hold the note on the door (cited from Clark & Clark, 1979). There are also many scholars who have studied the semantic correlation between denominal verbs and their source nouns, and classifies the denominal verbs into different categories. Quirk et al. (1985) sort them into seven categories; Zandvoort (1961) classifies them into four categories. Clark & Clark (1979) sort the denominal verbs they collected into nine types based on the main thematic roles of their source nouns: [1] locatum verb; [2] location verb; [3] duration verb; [4] agent verb; [5] experiencer verb; [6] goal verb; [7] source verb; [8] instrument verb; [9] miscellaneous verb. Driven (1986) analyzed the denominal verbs according to their latent semantic roles and classified them into five categories: [1] object verb; [2] instrument verb; [3] manner verb; [4] locative verb; [5] essive verb.

Shenghuan (2001) also studied the semantic motivation of denominal verbs. In his paper “Semantic Motivation of N-V Shift”, he proposes a hypothesis called Hypothesis

of Mutual Inclusion of Semantic Contents of Noun and Verb: the semantic contents of a noun entail some semantic components denoting actions and that of a verb also entails some semantic components denoting things. And he argues that the hypothesis can be employed as the semantic basis of noun to verb shift. The N-V conversion involves a semantic process and a grammatical process. The semantic process uses the semantic content of a noun which entails some components denoting action as the semantic basis of the shift and transfers it into implicit meaning of the denominal verb in the expression. In contrast, grammatical process is a process of metabolism of function, for in the realization of N-V conversion, part of the grammatical function is lost in the original nominal expression, and then the semantic functions which formed in the above semantic process compensates it to a certain extent.

To sum up, these approaches emphasize the semantic factors involved in the process of N-V conversion. Most of these studies focus on semantic contents of the parent nouns and denominal verbs and the detailed classification of this linguistic phenomenon rather than explanation. Therefore, it is necessary to probe into the cognitive aspect involved in the process of noun to verb conversion.

2.2.3 Pragmatic Perspective

Clark & Clark (1979) firstly began to study the interpretation of denominal verbs from the pragmatic perspective. Then, they offered one constraint on denominal verb use came from pragmatic considerations. This constraint, which was called the DVC—Denominal Verb Convention, stated that a noun could be seen to express meaning X if the speaker had good ground to expect that the listener could easily deduce meaning X according to their mutual knowledge. Obviously, the DVC bears the imprint of Grice's

(1975) cooperative principle. Whereas Kelly (1998) examines the other constraint on denominal verb formation which came from the IDVC, that states among other things like word frequency managed, nouns would be assumed to exploit verb uses to the degree that they are from a category whose nouns share similar senses when taken as verbs.

Fang and Shenghuan (2000) lay emphasis on the pragmatic inference of denominal verbs and even their cognitive strategies. They have studied how to understand denominal verbs' meaning under the theoretical framework of that the semantic content of a noun contains certain semantic elements indicating action, and claimed that the meaning of an N-V shift clause can be fully understood via the process of pragmatic reasoning. It also noted that this process could be decreased into programmed procedures within which information is processed in the light of the stereotypical relations reflected in the N-V shift expression, and that the process is in reverse forcefully affected by some fundamental strategies prevailing in the human mind. The stereotypical relations bedded in this process are subsystems of the entire information processing system.

2.2.4 Rhetorical Perspective

Rhetorical effects of denominal verbs are relatively easier to be explored by researchers. Therefore, many English and Chinese researchers have devoted their study to this field. From a rhetorical point of view, Clark & Clark (1979) found that the main function of denominal verbs is economy of expression. Mainly, they addressed such aspects of denominal verbs as the main functions, precision, vividness and surprise (Shichun, 1995; Xianzhu, 1996).

Firstly, the use of denominal verbs brings precision. From a rhetorical point of view, the main reason of denominal verbs is economy of expression (Clark & Clark, 1979). This economy is especially useful in new areas of technology for which there are too few verbs for situations that occur constantly. In computer circles, for example, people have evolved such denominal verbs as “key in the data, and flowchart the program”. With the development of new technology, many of denominal verbs are produced such as “xerox, telephone, radio, and paperclip”. In each case, a complicated situation is expressed economically in a single verb.

Secondly, the use of denominal verbs brings vividness. For a political writer, it is more effective to say “The mayor tried to Richard Nixon the tapes of the meeting” than to use “erase” in place of Nixon. The allusion to Nixon calls forth an image of an unscrupulous politician trying desperately to cover his tracks of an image that a longer description could never capture adequately. There seems to be an intrinsic value to make illusions without belaboring them.

Thirdly, the use of denominal verbs brings surprise, jokes, witticisms, and other rhetorical devices depend on their effect on economy of expressions.

Meanwhile, the research on Mandarin denominal verbs has made great achievements. One of the most important achievements in modern Mandarin denominal verbs’ researches mainly concentrated on the rhetorical features of denominal verbs, such as Fuyi (1997), Qun (1998) and so on. They summarized that the use of denominal verbs can achieve three major kinds of rhetorical effects: description in a vivid way; being economic and concise in conveying while rich in meaning; possessing humorous effects.

2.2.5 Experimental Perspective

The way to use experiments to study denominal verbs is guided by psychological theory. Kelly (1998) made a distinction between two classes of denominal verbs, namely, RD–Rule derived denominal verbs which arise from nouns pertaining to semantic categories whose insiders have the same meaning when taken as verbs, and idiosyncratically derived (ID) denominal verbs which are extracted from categories whose members have varying meanings when viewed as verbs. Then, he performs experiments to check for the impacts of this discrimination on the production and understanding of denominalization. Kelly’s (1998) experiment shows that there exists a psychological fact to this difference. Nouns that belong to semantic classes that hold a linked verbalizing rule is apt to be more quickly comprehended than idiosyncratically derived verbs. Speakers also tend to show more potentiality in choosing RD terms for denominalization, and are quicker at inventing denominal uses for RD terms. Therefore, it seems like that nouns that pertain to rule-based categories are more easily to be verbalized with the rule and more easily to be given the understanding based on the rule. The argumentum views pragmatic interpretations of the results, the theoretical foundation for the difference between RD and ID terms, and the more comprehensive point that experimental approach can be applied to probe innovative uses of language.

2.2.6 Cognitive Perspective

Many scholars have investigated denominal verbs from the viewpoint of cognitive linguistics. Some of these studies explore the underlying cognitive mechanism of denominal verbs with metaphor, especially with a particular emphasis on conceptual metonymy. Goatly (1997) indicates the metaphorical features of the process of noun to

verb shift. He (1997) also indicates that the conversion per se gives a way to the metaphorical change of the word meaning. Driven (1999) believes the process of noun to verb shift is typically found in three event schemata: the action schema, the location and motion schema, and the essive schema. Conversion is regarded as a process in which one participant in the event schema is metonymically focused upon, but the whole event is conceptually involved.

Chinese scholars have also paid attention to the cognitive operations of denominal verbs. Yunfei (1987) indicates that the number of verbs in English is much lesser than that of nouns, which account for 8.6% and 73.6% respectively. The noun to verb shift is used to fill-up the vacancy of verb expression. He attends to this phenomenon, but didn't give a further discussion theoretically. Zhengguang (2000) investigates the metaphorical thinking during the process of noun to verb shift; he did give a detailed explanation of the underlying cognitive operation of this phenomenon. Among these scholars, Dongmei (2001) makes use of metonymy theories to study nouns converted to verbs and verbs converted nouns in modern Mandarin. In her dissertation, she emphasizes that a metonymy model exists in Mandarin denominal verbs. This metonymy model can be described as follows:

(1) In a certain situation, we need to refer to a "target" concept Y.

(2) Concept X, serving as the reference point, is used to activate Y, and most co-exist with Y in the same cognitive frame.

(3) In a given "cognitive frame", where X and Y are closely related, Y will be sequentially activated with the reference of X.

(4) The reference point X is cognitively more salient than Y.

(5) If both X and X' can activate Y, and X has a higher salience degree than X', X will be easier to activate Y than X'.

(6) If both Y and Y' can be activated by X, and Y is more closely related to X than Y', Y will be easier to be activated than Y'.

However, the metonymic explanations proposed by Dongmei have its own weakness. The metonymic relations in Dongmei's list have some junctions and some of them are hard to distinguish. Judged from the data such as fork in Tools Indicate the Action and material in Materials Indicate the Action, there is no significant difference between the metonymies of Tools Indicate the Action and Materials Indicate the Action. Also, metonymic explanations proposed by her do not take metaphorical use of denominal verbs into proper analysis.

2.2.7 Overview of Contrastive studies on English and Mandarin Denominal Verbs

Finally, there are also literature concerned with the comparison between English and Chinese denominal verbs, which are most related with our research here. Although such kind of research is sparse, some accomplishments are achieved by some researches. For instance, Chan and Tai (1995) investigate the situation of one-syllable denominal verbs in Mandarin, Cantonese and Taiwanese. Xianzhu (1996) makes a thorough contrastive description and analysis between English and Mandarin denominal verbs in terms of lexical source, semantic structure, rhetorical uses as well as their status quos. According to it, both similarities and differences have existed in English and Mandarin denominal verbs. Variations in the quantity of use for English and Mandarin denominal verbs are obvious. English denominal verbs are utilized much more widely than Chinese ones. In addition, both English and Mandarin denominal verbs can be traced from

conventional lexicons. Both metonymy and metaphor are put into use in the understanding of English and Mandarin denominal verbs.

Later, Lingshun (2000) compares the previous studies, conversion process and trends of denominal verbs in English and Mandarin, and the differences of English and Mandarin denominal verbs in the aspects of functions, historical changes and characteristics. He concludes that there are more denominal verbs in English than in Mandarin. And proper nouns, abbreviations and acronyms are rare to be used as denominal in Mandarin, while in English, it is quite common. He also explores the translation of denominal verb in Mandarin and English.

Yi (2009) considers that the lexis source of Chinese denominal verbs is narrower than English and it's mainly from common noun and basic category words whereas English can also come from hyponym, abbreviation and proper noun, etc. Furthermore, denominal verbs in modern Chinese language, are mostly disyllabic and they show some new collocation features.

Wei & Ningning (2010) further demonstrate the differences and similarities between English and Mandarin denominal verbs, analyzing the radical causes of such language phenomenon from the perspective of cognition, linguistic system as well as culture.

To make a general survey of the comparative research, it can be found that there have been some achievements on the study of Chinese denominal verbs which lays the foundation for our later research. Meanwhile, there are some shortages in the predecessor's comparative research. First of all, the collection of data on English and Mandarin denominal verbs is not enough and that is merely confined to analyzing a few

examples. There is no comparatively systematic research on this yet or the overview cannot be revealed for English and Mandarin denominal verbs at all. Secondly, compared with study on English denominal verbs, it's comparatively less on research of Mandarin denominal verbs by linguists. Thirdly, the research on the distribution of denominal verbs in different genre is limited.

2.3 Limitations of Previous Studies

According to the available literature, readers can see the great contribution made by the scholars who devoted themselves to the study of denominal verbs. However, the disadvantages of previous studies cannot be neglected. Like a few rhetoricians (Fuyi, 1997; Qun, 1998) just pointed out that there are metaphorical meanings existing in denominal verbs which make language vivid and humorous. They do not interpret why using denominal verbs can have the effects. The studies on semantics depicted that during nouns shifting to verbs their meanings have changed, whereas, the notion of "canonical use" is not given due systematic semantic representation. From pragmatic perspective, much attention have been paid to the understanding caused by denominal verbs in communication. Although recently there is lots of research that are involved with cognitive linguistics, they only explore denominal verbs on the surface and slightly mention the metaphoric and metonymic mechanisms behind denominal verbs. They are all without further explanation. Even if Dongmei (2001) have pointed out the existing metaphoric and metonymic mechanisms in denominal verbs, they treat them separately and have not seen the inter-relationship between them, which will be clearly analyzed in this research. In short, the previous studies are relatively deficient, due to their base of traditional approach, which, detaching language from its base of human cognition and

essential reality, puts an emphasis on description of the phenomenon instead of its interpretation.

With the inspiration of previous studies, this dissertation will shed light on all aspects, especially trying to work out the differences and similarities of English and Mandarin denominal verbs cognitively as well as the interdependence between metaphor and metonymy. Besides, in order to make up for the descriptive inadequacy of the previous studies, this dissertation will try to gather as many denominal verbs as possible. All these verbs have been used in the real language environments. So the data provided is more reliable and can better represent the language reality.

2.4 Summary

This chapter has inspected the previous studies on the phenomenon of English and Mandarin denominal verbs from various perspectives. The literature review has been represented by the studies of Hale & Keyser from a syntactic perspective, by Clark & Clark, Shenghuan from a semantic perspective, by Clark & Clark's IDVC and Fang & Shenghuan from a pragmatic perspective, by Genyuan, Shichun, Qun from a rhetorical perspective, by Kelly from an experimental perspective and Wang Dongmei from a cognitive perspective. In discussing these different approaches to denominal verbs, the major findings and limitations of these researches are pointed out. It is from these previous studies that we obtain foundation and draw inspiration for this dissertation. Then, new approach is to be taken to explain the phenomenon of English and Mandarin denominal verbs in order to mend the weaknesses of the previous studies. And in the following part, it is quite necessary to give a detailed discussion of the new approach, that is, cognitive linguistics which is the theoretical basis of the present study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter, I will introduce the methodology of this study. Generally speaking, this study is a qualitative and comparative research of English and Mandarin denominal verbs based on data collection and conceptual analysis. Hence, the data sources and the way I analyze the collected data will be presented in this chapter.

3.2 Theoretical Framework

This dissertation adopts the view of cognitive linguistics as its basic research orientation. That is, this investigation and description are made within the theoretical framework of cognitive linguistics, as “cognitive linguistics is an approach to language that is based on our experience of the world and the way we perceive and conceptualize it” (Ungerer and Schmid, 2001, p. 36).

Firstly, the current study mainly adopts metonymy and metaphor theory, which represents a cognitive way of looking into word meaning.

Secondly, in terms of different perspectives taken towards language and cognition, this research also adopts three conceptual representations central to the research in cognitive linguistics. These are basic-level categories, profiling, summary and sequential scanning. This adoption will help to interpret English and Mandarin denominal verbs convincingly and comprehensively in this dissertation.

3.2.1 An Overview of Metonymy and Metaphor

Traditionally, “metonymy” has been seen as a figure of speech, namely, the act of referring to something by the name of something else that is closely connected with it,

like using the White House for the US president. On the other hand, “metaphor”, also viewed as a kind of rhetoric device in the traditional fashion, usually refers to an analogy between two objects or ideas, just like the way we use the word “mouse” to indicate to the pointing device for a computer, as the device resembles the animal “mouse” in many ways: the general size and shape and the tail-likeness. Metaphor and metonymy represent two ways of meaning extension. Their difference lies in that the metonymic extension is based on association between two concepts or objects while the metaphoric extension is based on similarity between them.

In cognitive linguistics, the most widely accepted recognition of metonymy is that given by Radden & Kovecses (1999, p. 21): “Metonymy is a cognitive process in which one conceptuality, the vehicle, provides mental access to another conceptuality, the target, within the same idealized cognitive model”. Concerning the operational mechanism of metonymy, Langacker (1999) contends that it is a reference point and activation phenomenon, like the entity is normally designated by a metonymic expression serves as a reference point affording mental access to the desired target, i.e. the entity actually being referred to. For example, in the following sentence:

Nobody knows what Moscow's response will be.

The entity that is normally designated by “Moscow” uses as a reference point providing mental access to the desired target, namely, the Russian Government. The entity which serves as the reference point is usually more salient and easily coded, while the desired target is often of less interest to us. By using the salient entity to refer to the less salient one, metonymy helps to understand concepts better.

Seen from cognitive perspectives, metaphors are not simply ornamental features of

some styles, but are a necessary constituent of human cognition (Cruse, 2004). Metaphor exists in our everyday life: we think in metaphor, speak in metaphor and experience in metaphor. Metaphor usually works on two overall domains, each with its own components and inner structure. The source domain is the one that is being applied to interpret the (often more sophisticated) target domain. For example, in the metaphor of describing a taxonomy figure is a tree, the TREE represents the source domain while the TAXONOMY FIGURE represents the target domain. The correspondences between two elements, like the tree vs. the whole structure, the leaves vs. the specific concepts, form the basis for the metaphor. Seen in a dynamic way, these correspondences can also be termed as “mappings”. Thus, a metaphor can be viewed as a process that involves the mapping of the source domain on to the target domain.

Following the above cognitive explanations of metonymy and metaphor, we find the major difference between them is that metaphor involves two conceptual domains and one is interpreted in accordance with another, while metonymy relates merely one conceptual domain, and the mapping or relationship between two things is approached within the same domain.

3.2.2 Characteristics of Conceptual Metonymy

Generally speaking, metonymy as a relationship involving substitution, that is to say, A REPRESENTS B. In “she’s just a beautiful face”, “face” is a substitute expression for people”, and the entire sentence is supposed to mean “she is just a beautiful person”. While this cannot be the entire meaning as “she is a beautiful person” does not mean she is beautiful “all over or up and down”, but it indicates that she has a beautiful face. This can be seen in the oddity of a sentence conveying a

counter-expectation: “She is a beautiful person but does not have a beautiful face”. The two metonymies, THE FACE FOR THE PERSON FOR THE FACE, thus complement and make up each other: A person’s face evokes the person and a person evokes the person’s face. Metonymy does not merely substitute one entity for another, however, interrelate them to make a new, complicated meaning. Many instances illustrate this point. For example, “I read Luxun yesterday”, “That kettle is boiling”. We do not use “Luxun” to refer simply to the author himself but to refer to the work he wrote. As such, we use “kettle” to indicate that the water in the kettle but not the kettle itself. In a sentence “The burglar was in Lily’s mind all the night”, it is logical to refer to the phrase “The burglar” is being used metonymically to suggest some idea of the burglar. It is the idea that was in Lily’s mind, instead of the burglar him/ herself. This is a representative instance of the metonymy THING FOR IDEA OF THAT THING.

According to current cognitive views, metonymy as well as metaphor is not just a linguistic device; actually, it is regarded as a fundamental reasoning process, which structures our conceptual knowledge (Glucksberg, 2001).

As we discussed in above sentence “She’s a beautiful face”, the “beautiful face” serves as the vehicle for accessing the target “person”. In the reverse description, “She’s a beautiful person”, the “person” serves as the vehicle for accessing the person’s “beautiful face” as the target. In their construal, both the vehicle and the target are conceptually present. However, one of them is viewed as being more salient than the other and is thus singled out as the vehicle. Here, we still use X for Y to stand for the metonymic relationship, however, this X for Y relationship does not mean only substitution but relationship in cognition.

Metonymy is a cognitive process operating in the one idealized cognitive model. ICM plays a major role in the generation and understanding of metonymy. Conceptual relationships within an ICM are regarded “metonymy-generating” relationships. Langacker (1993) concludes that the greater the conceptual contrast between vehicle and target, the better is a relationship suited to be exploited metonymically. ICMs are considered products of human conceptualizing capacities; they are composed of concepts and general categories, and correspond to the conceptual structures available to humans for making sense of their experience.

According to Lakoff (1987, p. 68), ICM is a complicated structured whole, a gestalt, which applies four types of structuring principles: (i) propositional structure; (ii) image-schematic structure; (iii) metaphoric mappings; (iv) metonymic mappings. Every ICM is believed to structure a mental space. Yongzhong (2004) subsumes the types of metonymy-generating relationships under two general conceptual collocations: (a) Whole ICM and its Parts; (b) Parts of an ICM. The whole-part configurations are supposed to explain the Thing-and part ICM, the Scale ICM, the Constitution ICM, the Event ICM, the Category-and-Member ICM, the Category-and-property ICM, and the Reduction ICM. The part-part collocation uses to diverse parts of ICMs and contains the Action ICM, the Control ICM, the Possession ICM, the Containment ICM, the Location ICM, the Sign and Reference ICMs and the Modification ICM. Here we just discuss one of them-the Action ICM. We apply Action ICMs to analyze the phenomena of N-V conversion in Contemporary English and Mandarin by some corpora I collected.

Action ICMs involve different sorts of participants that may be concerned in the predicate conveying the action or to one another. There are particular relationships like

those between an INSTRUMENT and the ACTION, the RESULT of an action and the ACTION, etc, all of which as part of Action ICM. These relationships may in turn be instantiated as specific types of metonymy, such as, AGENT FOR ACTION; INSTRUMENT FOR ACTION; OBJECT FOR ACTION; RESULT FOR ACTION; MANNER FOR ACTION; TIME FOR ACTION; DESTINATION FOR MOTION; INSTRUMENT FOR AGENT. The metonymic relationships listed above are typically achieved by word-class changes, in particular, N-V conversion.

3.2.3 Basic Properties of Metaphor

The important concept of metaphor is undergoing and comprehending one kind of thing in accordance with another; in other words, metaphor can be interpreted as the mapping from a source domain to a target domain. Lakoff (1980) used the expression domain to mean the concept, and the word mapping to stand for the mutual effect between two domains. They are operating together to offers us the connection between mapping and metaphor:

(a) Every metaphor has a source domain, a target domain, and a source-to-target mapping;

(b) Metaphor is the mapping from the source domain to the target domain;

(c) Mapping is the systematic unit of correspondences that occur between constituent components of the source domain and target domain;

(d) The features projected from the source domain have to satisfy the internal structure of the target domains;

(e) After mapping, the features of source domain are with those of target domain.

Metaphorical models are projections from an image schematic model in one domain to a

matching structure in another domain. Metaphorical meaning is the result of projection from source domain to target domain. Lakoff and Turner (1980) believe every metaphorical mapping includes these processes, i.e.

- (i) The vacancy of images in source domain mapping to the target domain;
- (ii) The relationship in source domain mapping to that in target domain;
- (iii) The property of source domain mapping to that of target domain;
- (iv) The knowledge of source domain mapping to that of target domain.

The basic function of metaphorical construal is to create similarity between different concepts. In fact, the mechanism of metaphorical construal is a projection from the properties of source domain to the target domain, or vice versa. Generally speaking, we often use a concrete concept to explain and understand an abstract one. (Figure 3.2.3) During the process of N-V conversion, we apply a parent noun to express a thing or a concept of a denominal verb. It actually embodies a conceptual action to an obvious, vivid, and visual action.

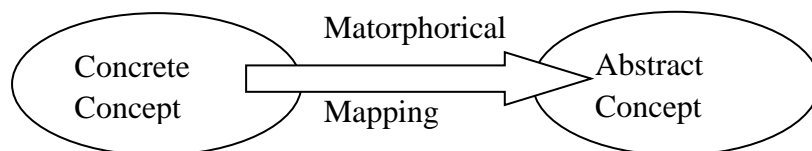


Figure 3.2.3 Metaphorical Mapping

Still taking the example of LOVE IS A JOURENY, we hold that, drawing on Lakoff and Turner's (1980) statement, each metaphorical mapping includes these processes:

- (1) The entity in the source domain (e.g. journey) is projected onto the one in the target domain (e.g. love). Under certain conditions, some entities in the target domain are independently beyond process of metaphor. For example, the entity traveler is

mapped onto a living person, that is, a lover. And other entities in the target domain are formed via the mapping process. For instance, the mapping of the points of journey onto the domain of love means concerning all sorts of events in one's love as the points constituting the love road, thus making us create the entity love road in the target domain of LOVE.

(2) The correlation in the source domain (e.g. journey) is mapped onto the one in the target domain (e.g. love). That is to say, a traveler has arrived at his or her destination, which can be mapped onto the case that a lover has achieved his or her goal in love. Thus, the relationship between traveler and reaching his or her destination in the source domain becomes the one between lovers and achieving their common goal in love, after it is projected onto the target domain.

(3) The properties in the source domain are projected onto the ones in the target domain. Such as, a traveler's specialties and weaknesses, which may influence his traveling modes and the interests, are projected onto a person's strengths and disadvantages of tackling with problems in love. Therefore that a person is capable of overcoming the impediments in journey usually means metaphorically that he or she can get over the difficulties in love.

(4) Knowledge in the source domain is projected onto that in the target domain or knowledge for a domain may make us to get conclusions from it. When a domain is used as the source domain of metaphorical mapping, the reasoning pattern in it will also be mapped onto the target domain. For instance, when we come into a dead end, it means that we cannot go any further and have to choose another way. In the same way, when we talk about the fact that a person gets into the dead end in love, it also means

that he or she must make another choice, and fall in love with another person. To be simple, let us take Johnson's view into account. Johnson (1993) also claims that metaphor is a conceptual mapping from a source domain to a target domain, with both ontological matching and epistemic correspondences entailed by the mapping. The ontological matching are those in which the entities in the source domain are projected onto the entities in the target domain, while the epistemic correspondences are those in which knowledge of the source domain is projected onto knowledge of the target domain to make reference to modes. The ontological correspondences between LOVE and JOURNEY are like the following:

(a) The lovers accord to travelers.

(b) The romantic relationship corresponds to the vehicle.

(c) The lovers' common targets accord to their mutual destinations on the tour.

(d) Impediments in the relationship accord to difficulties to travel. (Johnson, 1993, p. 417)

Johnson's theory of mapping is a good summary of and complement to Lakoff and Turner's statement. It should be apparent that the LOVE IS A JOURNEY metaphor is systematic projections according to ontological matching, which produce a set of epistemic matching in which knowledge of the source domain (journeys) is projected onto the knowledge of the target domain (love). Therefore, at the conceptual level, metaphorical projection is an established unit of ontological matching between entities in the source domain and those in the target domain. When the ontological matching is stimulated, mapping can map source domain inference modes onto target inference modes, and thus epistemic correspondences result. To be simple, the inferences derived

from a target domain depend on epistemic correspondences between two domains. Thus, the way we conceptualize by inference, and discuss about our love relationship will be decided by these epistemic matching.

3.2.4 Metaphor-Metonymy Interaction Identification

There is no clear-cut boundary between metaphor and metonymy in fact. Hence some researchers come up with the existence of a continuum linking them, with the very two at each polar. Dirven (1993) claims that metaphor-metonymy continuum hinges on notion of conceptual distance, in this view the greater the conceptual distance between the source and target domain of a mapping, the closer it will be to the metaphoric pole and vice versa. Mendoza (2002) revises Dirven's account and further argues that it is possible to show the existence of a continuum between metaphor and metonymy from the point view of mappings involved. It has long been realized that a great many metaphorical mappings seem to have an ultimately metonymic basis. Barcelona (2000) tries to examine the hypothesis that every metaphorical mapping presupposes a conceptually prior metonymic mapping, but he does not deny that a specific metonymy can often be conceptually motivated by a metaphor. In his view, the patterns of interaction or combination could be reduced to two general types:

(i) Interaction at the purely conceptual level.

(ii) Purely textual co-instantiation of a metaphor and a metonymy in the same linguistic expression.

Two main subtypes of metaphor-metonymy interaction at the purely conceptual level are also proposed:

(a) The metonymic conceptual motivation of metaphor.

(b) The metaphorical conceptual motivation of metonymy.

For (a), the metaphor SADNESS IS DOWN/HAPPINESS IS UP is motivated by metonymy, in which the behavior effect of sadness stands for the emotion. “I’m in low spirits, she is in the pits, and cheer up” can be regarded as metaphoric expressions motivated by metonymy. The metaphorical conceptual motivation of metonymies can be discovered in the example “she caught the minister’s ear and persuaded him to accept her plan”. In the example, the specific version of the conventional metonymy is EAR FOR ATTENTION, in which EAR is the source domain, ATTENTION is the target domain. And it is found that in the target domain a metaphor ATTENTION IS A PHYSICAL ENTITY is involved. So it is not surprising when people say that the example is a metonymy motivated by a metaphor. Denominal verbs can be described or interpreted as metonymy, metaphor or metonymy-metaphor interaction, largely based on people’s different experiences and understandings about the contextually and conceptually-induced linguistic expressions.

3.2.5 Metonymy and Metaphor in Denominal Verbs

Since metonymy and metaphor are conceptual phenomena, why do we relate them with denominal verbs, which involve mostly a morphological process in the traditional sense? First, as the title suggests, this study takes a cognitive view on denominal verbs, which indicates that we consider denominal verbs more as a cognitive phenomenon than as a morphological one. Second, this study takes noun-verb conversion as a specific type of metonymic and metaphoric thinking. On the whole, denominal verbs represent a THING FOR ACTION metonymy, a cognitive process in which the concept of a thing provides mental access to the whole action. However, upon further scrutiny, the relation

between the thing and the action has two types: (i) for one kind, the thing and the action exist in one cognitive domain; (ii) for the other, the thing and the action exist in two cognitive domains. Example (a) represents the first kind. The parent noun “cover”, namely the “thing” and denominal verb, namely the “action”, both exist in the cognitive domain of “putting something on the top of another thing”. On the contrary, in example (b), the verb “cover” exists in the cognitive domain of “concealing something that others will be unaware of it”, a different domain with that involved by the noun “cover”. Here the noun “cover” can be denominalized because there are some similarities between the action of “putting something on the top of another thing” and the action of “concealing something so that others will be unaware of it”, and the similarities have been mapped on to the target domain. Clearly, this relates a kind of metaphor.

(a) cover the table with a cloth

(b) cover the scandal

In view of our previous comment about the difference between metonymy and metaphor, we consider denominal verbs that agree with the first type as metonymic, and those in correspondence with the second type as metaphoric. In the following comparison of English and Mandarin denominal verbs, I also follow this classification on the first level.

3.2.6 Basic-level Categories and Denominal Verbs

Classical theory goes back to the ultimate origin from Greek antiquity and the dominance in psychology, philosophy and linguistics (especially autonomous linguistics, both structuralist and generative) throughout much of the twentieth century. Aristotle’s *Categorie* (Studtmann, 2008) is a singularly important work of philosophy; he is

considered the representative of classical theory, who distinguished between the essence of a thing and its accidents.

Moreover, prototype theory originated in the mid-1970s with the psycholinguistic research of Rosch into the internal structure of categories. Its revolutionary character marked a new era for the discussions and brought existing theories (such as the classical view) into question.

The traditional objectivist view holds that categories are defined in terms of common properties of their members and membership in a category is a matter of all or none (Lakoff, 1987). But a wealth of new data on categorization appears to contradict this view. In its place there is an alternative view of categorization terms as “the theory of prototypes and basic-level categories” by Rosch (1975). Rosch explores the formation of categories in many different cultures and finds in them universal adherence to certain common prototypes. These prototypes describe a basic category in terms of a family of resemblance rather than by means of a series of attributes. Membership in a category is not a matter of whether it has got all the attributes required, but is determined by the perceived distance of resemblance of the entity to the prototype. For instance, colour word “red” is the prototype category, we may also say: “a good red, sort of red, slightly red”, but we found that there is usually a single colour which is the best example of the colour word (the prototype), the further a colour is from the prototype the less good it is an example of the colour category.

Rosch also believes that the world provides us with structured information. Basic objects that have salient features present natural basic-level categories. These basic-level categories have a level of abstraction that presents the maximum information

with the least cognitive effort. Basic level category is based on our optimal interaction with the environment. It has the following features: highest level at which a single mental image can represent the entire category; highest level at which category members have similarly perceived overall shapes; and highest level at which a person uses similar motor actions for interacting with category members.

Above basic-level categories, there are super-ordinate categories which are more abstract and more comprehensive. Below basic-level categories there stand subordinate categories, which are less abstract and less comprehensive. For example, bird may be considered a basic-level category. Superordinate to it is the category of animal. Subordinate to it is the category of sparrow, swallow, etc.

The basic-level categories, superordinate categories and subordinate categories form a structured hierarchical organization of language. In terms of these relationships, we understand and interpret the world. Basic-level categories, which derive their existence from basic objects, are of crucial importance to this hierarchy. They represent the ways in which nature is perceived to cut itself at its own joints.

In light of these, in the next chapter we will explore denominal verbs to find how basic-level categories occurs in.

3.2.7 Profiling

Croft & Cruse (2004) define “Profile” as “the concept symbolized by the word in question” and “base” as “knowledge or conceptual structure that is presupposed by the profiled concept.” They also use “Profiling” to refer to the process of construal operations. An expression’s profile is the entity that the expression is used to designate or refer to. It is the specific focus of attention at a given point of processing and is more

prominent or more highly activated than the base.

Langacker (2004a, p. 138) holds that “the semantic value of an expression resides in neither the base nor the profile alone, but only in their combination”. Therefore, it is argued that the semantic value of a noun is depicted in terms of a profile and a base. Some expressions, for instance, usually invoke the same base, but contrast semantically by profiling alternative parts on this same base. “Island, the water near the island, and shoreline”, for example, invoke the same entity—a body of land completely surrounded by water, but they profile different parts of the same entity: “island” profiles the land mass; “the water near the island” profiles a portion of the water; “shoreline” profiles the boundary between water and land.

For some expressions, they denote the same entity in the world but profile it against different bases. For example, “land” and “ground” profile approximately the same thing but against different bases: “land” profiles the dry surface of the earth in contrast with sea, while “ground” profiles the dry surface of the earth in contrast with air.

According to Langacker (2004a), an expression can profile a thing, a relation or a process. The various grammatical categories (noun, verb, adjective, etc.) are defined by the nature of their profile. A thing does not refer literally to a physical object, but it is defined in a more abstract manner and refers to cognitive events. A noun profiles a thing which is a region in a domain or domains, conceived as static and holistic.

The terms profile and base can be further clearly introduced by the example of circle and arc which has been used by Langacker (2004a). The concept circle is a curved line on which every point is equally distant from one fixed point inside the curve.

Figure 3.2.7 illustrates what the term circle profiles. According to Langacker, an understanding of what a circle is rests on a prior understanding of the basic domain of two-dimensional space. The basic domain of two-dimensional space serves as the base, and its profile is a configuration (set of points) in this domain. As shown in Figure 3.2.7(a), the box enclosing this diagram delimits the base, and the domain is labeled in the lower right-hand corner. Heavy lines are used to identify the profile.

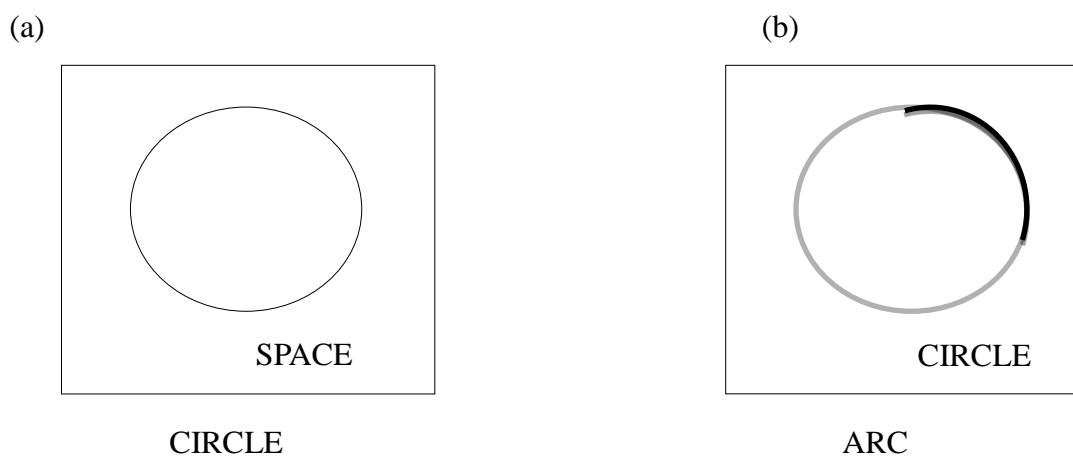


Figure 3.2.7 Circle and Arc (Langacker, 2004, p. 184)

As for arc, only when a set of points is identified with a portion of a circle is it recognized as constituting an arc (and not just a curved line segment). [CIRCLE] is consequently an abstract domain that serves as the scope of predication for the higher-order concept [ARC], as shown in Figure 3.2.7(b); whereas undifferentiated space functions as the base for [CIRCLE], [ARC] has for its base the two-dimensional configuration that [CIRCLE] profiles. [ARC] designates only a segment of this configuration, so only a representative portion of it is shown with a heavy line.

According to Langacker, the concepts CIRCLE and ARC are intimately related, and this relationship must be presented in conceptual structure. Langacker describes the

relationship between CIRCLE and ARC as one of a concept profile against a base. The profile refers to the concept symbolized by the word in question. The base is that knowledge or conceptual structure that is presupposed by the profiled concept.

3.2.8 Summary/Sequential Scanning

As mentioned above, a noun designates a thing and a verb designates a process. In order to explain the variation between word classes, Langacker (2004a) suggests that the choice of word class is linked to and even determined by our cognitive abilities in particular to scan the cognitive input. He proposes two different types of scanning: summary scanning and sequential scanning. Figure 3.2.8 illustrates these two different modes of cognitive processing.

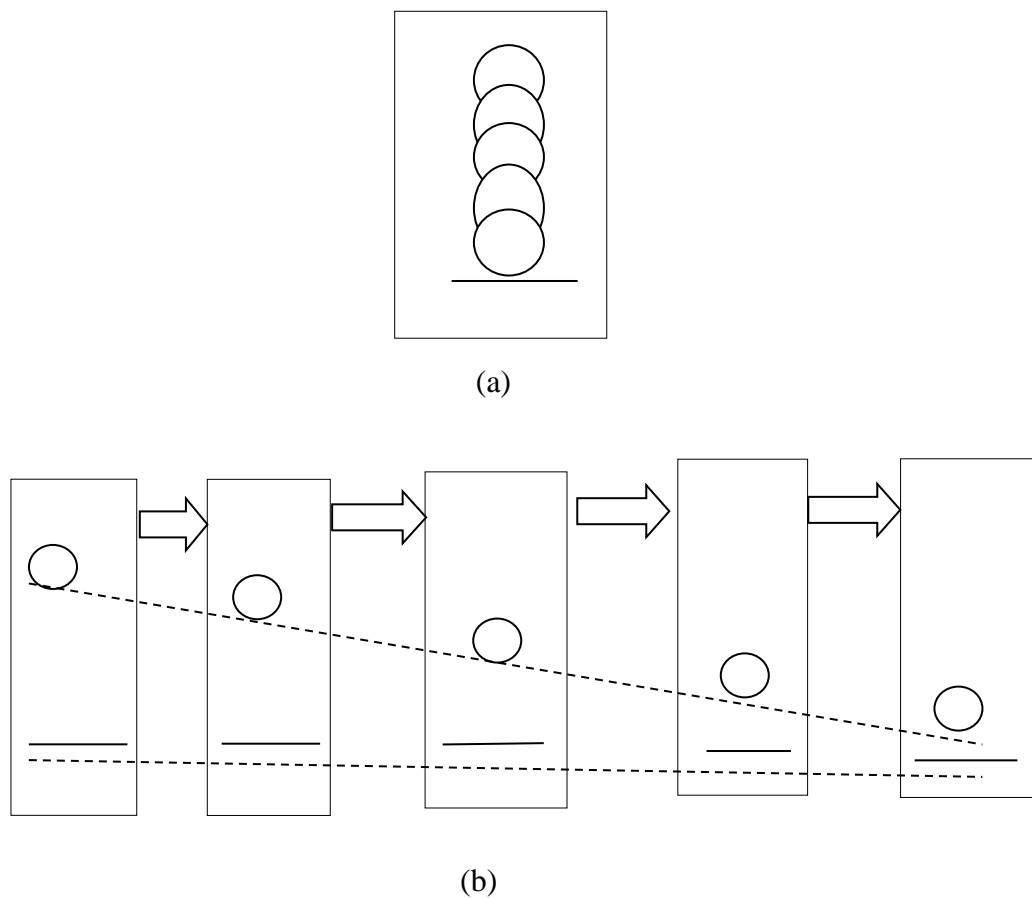


Figure 3.2.8 summary/sequential scanning (Langacker, 2004, p. 144)

As diagrammed in Figure 3.2.8(b), sequential scanning involves the successive transformation of one configuration into another. The component states are processed in series rather than in parallel. This scanning characterizes processual predications and defines what it means to follow the evolution of a situation through time. It is the ability we display when watching a motion picture. Therefore, sequential scanning is thus suitable for temporal relations and is predominately expressed by verb. But summary scanning is basically additive and the process of conceptual components proceeds roughly in parallel. All facets of the complex scene are simultaneously available, and through their co-activation (with reactivation as needed) they constitute a coherent gestalt, as in Figure 3.2.8 (a). This is the mode of processing characteristic of things as well as atemporal relations.

For example, using a nominal expression to refer to an event, we typically construe the entire event outside of conceived time, as in (a); while using verbs with tense inflection, we typically construe the event in terms of temporal sequentiality (within conceived time), as in (b).

(a). The fall of the ball

(b). The ball is falling.

The difference between (a) and (b) can be illustrated by Figure 3.2.8. In summary scanning the facets of the situation, as reflected in Figure 3.2.8(a), are examined one after the other, the stages are added up, and when the scanning process has been completed, all the facets are assembled as a whole, as a single gestalt. It is for this gestalt status that the space of the event is shown by bold-line box to indicate its wholeness. This kind of scanning is capable of making a whole region simultaneously

available and explains the comprehensiveness of the meaning that is conveyed by the noun “fall”. The various positions of the ball along the path are added up and projected in to a single picture. In contrast, in sequential scanning the stages of the falling ball are processed as a continuous series of configuration. As shown by Figure 3.2.8(b), these stages are viewed successively rather than simultaneously. At the same time, these distinct stages are perceived as a coherent evolving scene, which is represented by the two broken lines connecting each box. The conceived time is reflected by the “-ing” inflection of the verb fall. As illustrated by Figure 3.2.8(b), each stage of the falling ball is characterized by a certain relationship of the ball in contrast with its initial position. Seen in sequence, these processing stages reflect the downward motion of the ball.

3.3 Research Approach

Methodologically, this study is mainly qualitative and theory-driven. It will probe into the language phenomenon specifically, including data comparison and data application. The qualitative and theoretical aspect lies in the conceptual approach to the interpretation of denominal verbs. I tend to examine the mechanisms of denominal verbs through some cognitive concepts and theories and try to find out whether there are some similarities and differences between the working mechanisms of denominal verbs in English and Mandarin. Moreover, this study focuses on a contrastive analysis between English denominal verbs and Mandarin ones. Therefore, the data of this research is mainly centered on a synchronic description of the meanings of denominal verbs in modern English and Mandarin.

3.4 Data Collection

The data of this study consists of two parts: English denominal verbs and Mandarin

Chinese denominal verbs. To guarantee the scientific status of this research, these denominal verbs mainly come from two sources: examples in academic articles and dictionary. Besides these important sources, other public Internet sources are also very helpful in data collection, such as the powerful Internet search engines URL: <http://www.google.com> is a source for collecting up-to-date usage of English data. Another Internet search engine URL: <http://www.baidu.com> is an important source for collecting Mandarin data. And some of the fresh Mandarin data is also drawn from the newspaper---*Shaanxi Business View* (<http://hsb.hsw.cn/>).

The English metonymic denominal verbs in this study mainly come from the 1335 examples given by Clark & Clark (1979). Some of the Mandarin Chinese data are also collected from previous literature “A Cognitive Study of Denominal Verbs” written by Wei (2009). The second avenue of data is dictionary. Many Mandarin denominal verbs were collected from *Contemporary Chinese Dictionary* (fifth edition). In line with the criteria discussed above, the assumed Mandarin denominal verbs were collected accompany to their corresponding source nouns. Denominal verbs collected in newspaper have also been included in the database for this study. In fact, a few innovative denominal verbs have been collected in this way, such as 音乐你的生活 yīn yuè nǐ de shēng huó ‘music your life’—advertisement for QQ Music. The powerful Internet has also been helpful, as a wealth of fresh data can be found on it. And overall, these sources of data make sure that the point of view put forward is well grounded and persuasive.

As denominalization is zero-conversion from a noun to a verb, a difficulty that I have to face in data collection is to decide which of the two derivationally related words

is to be considered the parent noun, and which the denominal verb. I have resorted to three methods. The first method is to rely on my intuition, as I am native Mandarin Chinese speaker, and it is expected that native speakers can consult their intuition and arrive at a fairly certain decision. Sometimes the form of a word may also tell whether it is converted. For example, since verb compounds are extremely rare (Adams, 1973), “to blacklist” is certainly a base noun and a converted verb. In Mandarin, the distinction between noun and verb can also be achieved by observing the syntactic position of the words. If both intuition and formal indications fails, I may turn to the third way—dictionaries, in which the sequences of the occurrence of different word forms are recorded.

In the process of data collection, I have tried my best to collect as many examples as possible, so as to guarantee the scientific status of this research. As this is a comparative study, an important question I have to consider is whether the English data and the Mandarin Chinese data are comparable. The 1335 English examples listed in Clark & Clark’s (1979) *When Nouns Surface as Verbs*, which take up about 90% of the whole English data, are from “newspapers, magazines, novels, radio, television, consultants, and previous studies” (Clark & Clark, 1979, p. 768). On the other hand, the Mandarin Chinese denominal verbs are also from similar resources, as has been introduced at the beginning of this section. Therefore, generally speaking, it is fair to say that the two groups of data are comparable.

However, there are still two deficiencies in the database part which I cannot avoid. The first deficiency is that the English data and Mandarin Chinese data are unmatched in quantity, as I have collected 1399 English examples and 231 Mandarin Chinese

examples in total. This is due to two reasons: first, English denominal verbs are truly more abundant than Mandarin Chinese ones; second, English vocabulary is much larger than Chinese vocabulary. The third version of *Webster's New International Dictionary* has included as many as 450, 000 lexical entries while the Contemporary Chinese Dictionary published in 2005 only list 65, 000 lexical entries (Xianzhu, 1996, p. 58). Since the number of English and Chinese data is not equivalent, I have mainly focused on the proportion of different categories of English and Mandarin Chinese denominal verbs. The second deficiency lies in the fact that the English and Mandarin Chinese data may come from sources which are not exactly corresponded. The comparison results would be more scientific if I collect the two groups of data from two definite sources which are correspondent in type and quantity. It is pitiful that I can hardly meet that due to limited time and instrument. In the later comparative study, I will pay attention to these deficiencies and try to lessen their negative impact on the research result.

3.5 Data Analysis

After introducing the data sources, I will proceed to explain how I am going to analyze those data in this section. As far as I know, Clark & Clark (1979, p. 769) have only selected verbs that “have a non-metaphorical concrete use as far as possible” for their study. Therefore, their later classification and discussion involve only the non-metaphorical denominal verbs, or in other words, metonymic ones. I consider that it is for the convenience of the classification that they set such a criterion for their data. As Clark & Clark (1979, p. 768) have said, the classification they have thought of, as those of Jespersen, Marchand, and Adams, uses the paraphrases of the verbs. For each primary type there exists a universal paraphrase that basically satisfies most of its

members. The paraphrases themselves are then categorized in the light of the case role that the parent noun performs in them; they have labeled most of the categories with the names for the case roles. Since the parent noun must play a case role in the general paraphrase, its denominal verb could only be metonymic. Nevertheless, it is hard to pay no attention to the metaphoric use of denominal verbs. Let's compare the following two sentences:

(a) Jane blanketed the bed.

(b) The valley was blanketed with mist.

The word “blanket” in the two sentences can both be viewed as a denominal verb. The first “blanket” is classified into the category of LocatumVerbs, as it fits into the general paraphrase “Jane did something to make it to come up that [the bed had one or more blankets on it]” (Clark & Clark, 1979, p. 769). The second sentence, however, cannot be paraphrased that way. Here “be blanketed” does not mean “to be covered with a real blanket, but to be covered with a layer of mist”. Such usage is allowed here as what the layer of mist does to the valley is similar to what a real blanket does to a bed. Since “to blanket” is used in a metaphoric way here, we cannot assign any case role to it, and therefore cannot classify it into any category put forward by Clark & Clark (1979). Then where to put the denominal verbs that have been used in a metaphoric way?

This study proposes to divide the collected denominal verbs into two groups according to their uses first, i.e. metonymic use and metaphoric use.

In this dissertation, we define whether denominal verb has metaphor or metonymy or not, in light of the meanings of denominal verb and its parent noun. The meanings of them are consulted in dictionary. Dictionaries, as records of the lexicon of a language

compiled by lexicographers, provide lexicographical evidence for changes in the word-formation and word-meanings of a language. Following the cognitive linguistic assumption that meaning equates conceptualization, the process of conceptualization can thus be traced through the development of word-meanings as recorded in dictionaries. Therefore, if denominal verb's meaning is different from the original meaning of parent noun, metaphor in it is vouched. If denominal verb's meaning is similar to parent noun's, we judge it has metonymy. Based on the above ideas, we distinguish metaphors or metonymies in denominal verbs.

For the denominal verbs that have both metonymic and metaphoric uses, like the "blanket" mentioned above, they will be counted in for each group. The specific differences between the two kinds of cognitive model in denominal verbs will be elaborated later. Then we will sub-divide metonymic denominal verbs according to Clark & Clark's classification in general, though some minor modifications will be made.

In total I have collected 1335 English metonymic denominal verbs and 175 Mandarin ones. In above I have introduced Clark & Clark's classification, that is, to divide denominal verbs into Locatum Verbs, Location Verbs, Duration Verbs, Agent & Experiencer Verbs, Goal Verbs, Source Verbs, Instrument Verbs, and Miscellaneous Verbs, then I will categorize them according to their semantic features of their innovative use. All the categories except the last one represent denominal verbs whose parent nouns play a certain case role in the general paraphrases. The miscellaneous verbs, as Clark & Clark suggest, include the following types:

A: Meals & Foods: breakfast, tea

B: Crops: blackberry in the woods, crab, fish

C: Parts: The shot rimmed off the basket, wing the bird

D: Elements: rain, snow, hail

E. Other: house (Clark & Clark, 1979)

Though Clark & Clark classify them as Miscellaneous Verbs, they suggest we might as well call verbs like “lunch” an “object verb” as “Jeff lunched on a hotdog and a coke” can be paraphrased as “Jeff ate a lunch of a hotdog and a coke”, in which “lunch” is the object of the sentence. Also, it is coincidental that in Mandarin there are similar examples (Wei, 2009, p. 55):

我 们 在 一 个 法 国 餐 馆 晚 餐。

wǒ-mén dào yí gè fǎ-guó cān-guǎn wǎn-cān

we in one measure word France restaurant supper

We went to a French restaurant and had a supper.

每 天 下 午 茶 一 下。

měi tiān xià-wǔ chá yī xià

each day afternoon tea one verbal measure word

Have a drink of tea every afternoon.

Therefore, for the convenience of comparison, we propose to extract the category of Object Verbs from the category of Miscellaneous Verbs, and then the new categories and the statistics of the data are presented in the later sections.

And according to the referents of the parent nouns, the metaphoric ones will be sub-classified into five groups. In total I have collected 64 cases of metaphoric uses of denominal verbs in English and 56 such cases in Mandarin. Those examples, either

“behave in the manner of”, “act as”, or “resemble the person, animal or object denoted by the nouns”. Therefore, it is impossible to divide metaphoric denominal verbs according to the case role that their parent nouns have been assigned to, as the real things that the parent nouns refer to do not actually appear in the context. They only serve as the source domain, and certain characteristics of them are extracted and profiled to refer to an act. Generally, the nouns that can be used metaphorically as verbs can come from five types of words: (1) verbs whose parent nouns refer to persons; (2) verbs whose parent nouns refer to animals; (3) verbs whose parent nouns refer to human body parts; (4) verbs whose parent nouns refer to objects; (5) verbs whose parent nouns refer to places, though the distribution of each type might differ in the two languages. The data of metaphoric denominal verbs are shown in the following parts.

After sorting out and sub-classification of the denominal verbs, all those types of English and Mandarin metonymic and metaphoric denominal verbs will be compared. At last, the differences and similarities and English and Mandarin denominal verbs will be summarized and analyzed, mainly from a cognitive way.

3.6 Distribution of Metonymic Denominal Verbs

Appendix I has shown that almost all the categories put forward by Clark & Clark (1979) have corresponding ones in Mandarin except for Duration Verbs. Although the number of the two groups of data is not balanced, some hints can still be located from the distribution of each category. The eight categories (except Miscellaneous Verbs) of English and Mandarin metonymic denominal verbs are listed from the highest to the lowest in the following tables.

Table 3.6 Distribution of English and Mandarin Metonymic Denominal Verbs

English	Instrument	Locatum	Location	Goal	Agent	Object	Duration	Source
Metonymic DVs	30.7%	25.5%	14.2%	12.7%	12.2%	2.3%	1.0%	0.2%
Mandarin	Instrument	Goal	Locatum	Location	Object	Agent	Duration	Source
Metonymic DVs	28.6%	17.1%	15.4%	14.3%	11.4%	10.3%	---	1.1%

Table 3.6 demonstrates that Instrument Verbs account for the largest part in both English and Mandarin denominal verbs. English Locatum Verbs also account for a relatively high percentage, and next come location Verbs, Goal Verbs, Agent Verbs, three categories which are adjacent with a similar amount. English object Verbs, Duration Verbs and Source verbs all account for a tiny part of the whole. For the Mandarin part, the second largest group is Goal Verbs. The proportions of Locatum Verbs, Location Verbs, and Object Verbs are similar with each other. It is also worth noting that Mandarin Agent Verbs represent only 10.0% of the whole, smaller than that of the English ones.

3.7 Distribution of Metaphorical Denominal Verbs

In Appendixes we have also offered the statistics of metaphoric denominal verbs.

Table 3.7 has listed the five sub-categories from the highest to the lowest:

Table 3.7 Comparison of English and Mandarin Metaphoric Denominal Verb

English	Objects	Persons	Animals	Human	Places
Metaphoric DVs	32.6%	25.8%	24.2%	Body Parts	4.8%
Mandarin	Objects	Parsons	Animals	Places	Human
Metaphoric DVs	33.8%	29.2%	21.5%	12.3%	Body Parts
					3.1%

From Table 3.7, we can see that the general distribution of the five categories in

English is more or less the same with that in Mandarin. Nouns that refer to objects, persons and animals take the largest part in both English and Mandarin metaphoric denominal verbs. The difference is that in English more human body part nouns can be used metaphorically than in Mandarin, while the denominalization of place nouns in Mandarin is more often than in English.

3.8 Summary

This chapter have devoted to introduction of theoretical framework, data collection and analysis. This part first makes it clear that a theory for the interpretation of denominal verbs. Conceptual metonymy and conceptual metaphor theory provide a strong theoretical foundation for the analysis of denominal verb, and other three conceptual representations, namely, basic-level categories, profiling, summary and sequential scanning also helpful to interpret English and Mandarin denominal verbs. It is these theoretical insights that enable us to make clear what factors are laying behind the linguistic phenomenon of denominal verb.

Then, data collection, the basis of this study, is expounded. Hereby, our purpose in this dissertation is to collect many examples as possible to guarantee the reliability of this research.

In the data analysis part, I adopt the above theories to classify denominal verb in English and Mandarin through a large number of examples.

The distribution of metonymic and metaphorical denominal verbs will be helpful for the comparison of denominal verbs in the two languages.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Metonymies in English and Mandarin Denominal Verbs (Results in Relations to Research Question 1)

In tradition, conversion is a special case of derivational morphology. To take “bank” as an example, it is a noun in origin, but it can be converted to verb “to bank”. People can readily create and understand this kind of conversion, even though people may have never heard of that before, for instance, “to porch the newspaper”. One proposal is that in using such verbs people follow a convention, i.e., the speaker implies to indicate the kind of state, event, or process that he has good grounds to believe that the listener can easily and particularly compute on this circumstance, in accordance with their shared knowledge. However, the present dissertation holds that in the light of cognitive linguistics, one reasonable explanation for such kinds of phenomenon is that each conversion process implies a metonymic motivation.

As stated above, language is largely metonymic. Conceptual metonymy not only serves as the cognitive motivation of conversion (noun-verb conversion in the present research), but is also crucial in the understanding of the process of conversion.

Metonymy is a basic mode of thinking that is used in everyday communication. It also serves the function of providing understanding. As a specific type of metonymy, the use of denominal verb in language reflects people’s metonymic cognitive mode of thinking. For the sake of convenience, we use “metonymic mechanism” to refer to this way of cognition. On denominal verb, this reflection is the cognition that people use one

concept of a thing to evoke another concept of an act.

Normally, a noun can be used to refer to an entity, while a verb can be used to state a certain relation. Denominal verb is to activate the concept of relation by referring to a concept of entity, which can be considered as a process of metonymy. In cognitive linguistics, metonymy is a cognitive process in which people employ, in one cognitive domain, the salient, well-understood and easy to perceive part to stand for the whole or another part of the whole or to choose the whole as a gestalt to stand for one of its parts (Coulson and Oakley, 2003). In denominal verbs, we have to do with metonymy precisely because we always remain within one and the same cognitive domain of event.

This section is to be devoted to exploring the conceptual metonymy in English and Mandarin denominal verbs. On the basis of data collection, a classification of metonymy in English and Mandarin denominal verbs will be made, and then some examples of each type will be analyzed within the framework of metonymy theory. Finally, it is followed by a discussion on the basis of comparative analysis.

4.1.1 Instrument For Action

Instrument verbs are the commonest type in both English and Mandarin metonymic denominal verbs, these verbs whose parent nouns denote instruments. As examples of instrument verbs are abundant, Clark & Clark (1979) then sub-classified into 16 types based on the function of the parent nouns. The major six types are:

(a) Vehicles or for the purpose of transportation: “sports-car, trolley, bicycle, taxi, Greyhound, Buick, limousine, 747”

(b) Music instruments: “trumpet, bugle, pipe”

(c) Kitchen utensils: “fork, teaspoon, chopstick”

(d) Places: “greenhouse, lobby, school”

(e) Body parts: “eyebrow, eye, mouth”

(f) Basic instruments used for cleaning, hitting, cutting, stabbing, destroying, catching, blocking, etc. Like: “mop, broom, hammer, bat, knife, sabre, tusk, broadax, bomb, TNT, trap, net, screen, block” (Clark & Clark, 1979, p. 776)

The performance of an act sometimes cannot be completed without an instrument. The relationship between an act and a required instrument has been conventionalized in human cognition. In this circumstance, the instrument is so important to the completion of the act that it attracts the most attention in human being’s cognition. Since the instrument is close to the concept of act, it can serve as the input or vehicle of the metonymy in a given context. The instruments used are purposely and intentionally employed and the nouns describing them are readily converted into verbs. Then we have noun-to-verb conversion motivated by the metonymy INSTRUMENT FOR ACTION. Following examples stem from the Internet. (Retrieved January 5, 2012, from <http://www.baidu.com/>)

(1) The cargo is being trucked across the country.

(2) Sam bicycled to school every morning.

(3) She mopped the floor.

(4) The goods were shipped last week.

(5) He hammered the nail into the wall with his head.

(6) The TV station communication-satellited international live transmission of the opening ceremony of the 2012 London Olympic Games.

(7) They videotaped thousands of angry protesters trying to storm a government

building.

(8) We will ship the goods according to the agreed time schedule.

(9) He torched the raft.

(10) Chris e-mailed him a message.

(11) The criminal knifed his victim in a rage.

(12) The little boy is brooming the floor.

Each of the underlined words in the above examples is an instrument for the action.

All of them are converted into denominal verbs to mean to perform an act with an instrument. In most cases these instruments are very essential in the process of the completion of the action or event, so they are salient and important and can naturally be selected as the input for the conversion. Since the use of them reflects people's metonymic thinking, they can be listed here together to illustrate the motivation of noun-to-verb conversion, i.e. conceptual metonymy.

Now let's analyze sentence (11) and (12) to show the underlying cognitive mechanism of this category.

In (11), behind our comprehension of the verb "to knife" is the source-in-target metonymy INSTRUMENT FOR ACT. "To knife" profiles the instrument applied by the criminal to kill the victim; its meaning probably is distinct from the more generic meaning of the verb "to hit" in which information for the instrument is not offered (cf. The criminal knifed his victim in a rage. vs. The criminal killed his victim with a knife in rage). The full importance of "to knife" is a direct result of the source-in-target nature of the underlying projection whose target is the matrix domain in its entirety.

In (12), the verb "to broom" is the metonymy instrument for action. It profiles the

instrument used by the little boy to clean the floor. Its meaning may be contrasted with the more general meaning of verb “to clean” in which information about the instrument is not provided, “to broom” is the result of the source-target nature of the metonymic mapping whose target is the whole domain.

And also we have more examples about English instrument verbs such as “hammer the nail into the board (hit by hammer); bomb the village (destroy by bomb)”. From all the examples, we can see that parent nouns are almost concrete ones denoting some specific and concrete entities. The parent nouns that have referential meaning can be employed to refer to an action with the instrument.

In Mandarin, there are also a large number of instrumental nouns converted into verbs, even many usages of them have been conventionalized that people usually are not aware of the process of denominalization. Such as “锯 jù saw, to saw; 锁 suǒ lock, to lock; 箍 gū hoop, to bind something with a hoop; 犁 lí plow, to plow; 夹 jiā clamp, to clamp; 梳 shū comb, to comb; 锄 chǔ hoe, to hoe; 锤 chuí hammer, to hammer”, etc.

These words can be understood as metonymic ICMs since any of the participants in an action ICM can be the bearer of the saliency characteristic and then use as the input for the N-V conversion process. The salient participant is hence particularly selected to profile the action itself. For instance, “锤 chuí hammer”, which is an instrument as a noun, here used as a verb, a process (to hammer) in which the instrument is involved. In the “锤 chuí hammer”, instrument is quite salient that it can represent the action itself.

Here are more specific instances from *Contemporary Chinese Dictionary*:

(13) 铲 煤

chǎn méi

shovel coal

to shovel coal

(14) 锯 木头

jù mùtóu

saw wood

to saw wood

(15) 网 鱼

wǎng yú

net fish

to catch fish with net

In (15), underlying our comprehension of the verb “网 wǎng” (means to catch with net) is the source-in-target metonymy INSTRUMENT FOR ACT. “网 wǎng net” describes the instrument used by the person to catch fish; its meaning may be contrasted with the more generic meaning of the verb “抓 zhuā to catch” in which information about the instrument is not provided.

(16) 我 住 了 多 天, 每 次 都 不 锁 门。 (*Shaanxi Business View*, Retrieved June 15, 2012, from <http://hsb.hsw.cn/>)

wǒ zhù le duō tiān, měi cì dōu bù suǒ mén

I live AP many days, every time all NEG lock door

I lived for many days and didn't lock the door every time.

(17) 梳 一 遍 学 过 的 内 容。 (Retrieved December 28, 2011, from

<http://www.baidu.com/>)

shū yī bian xue guo de nǎ-róng

comb one time learn AP GEN contents

Comb out the things that have learned before.

(18) 把 这 几个 字 框 起来。 (Retrieved June 22, 2012,

from <http://www.qikan.com.cn/Article/zsjs/zsjs201206/zsjs20120619.html>)

bǎ zhè jǐ-gè zì kuāng qǐ-lái

function word these several words frame complement

Frame up these words.

(19) 你 为什么 不 电话 我? (*Shaanxi Business View*, Retrieved

August 26, 2012, from <http://hsb.hsw.cn/>)

nǐ wǎ-shén-me bù diàn-huà wǒ

you why NEG telephone me

Why don't you telephone me?

Here “锁 suǒ lock, 梳 shū comb, 框 kuāng frame, 电话 diàn-huà telephone, 锉 cuò rasp”, are all instrumental nouns converted into denominal verbs. They are understood as “to lock the door with a lock”, “to comb out the things as a comb does”, “to round the words up by a frame” and “to call me with a telephone”.

(20) 木板 太厚, 锉 一 次 很 费 工夫。 (*Shaanxi Business View*,

Retrieved August 26, 2012, from <http://hsb.hsw.cn/>)

mù-bǎn tài hòu, cuò yī cì hěn fěi gōng-fū

plank too thick, rasp one time very cost time

It's very time-consuming to rasp the plank because it's too thick.

In sentence (20), “挫 cuò rasp” refers to a hand tool which is used for rubbing hard objects to make smooth, shape them, or cut through them. In this instance, it means “to cut through the board by the hand tool”.

From these examples, we can see, compared to English, this category in Mandarin is similar with the counterparts in English. All of the instances of this category are conventionalized usages. All of their meanings and usages are embodied in dictionaries.

4.1.2 Object Of Motion For The Motion

Locatum verbs are the metonymies OBEJECT OF MOTION FOR THE MOTION. The parent nouns of the denominal verbs are in the objective case in sentences that depict the location of one thing in reference to another. Such as,

(21) a. He blanketed the floor in the library.

b. He put the blanket on the floor in the library.

Sentence (21 a) can be paraphrased as sentence (21 b), in which parent noun “blanket” is in the objective case. Denominal verb “blanketed” in sentence (21 a) indicates the location of the blanket with reference to floor.

English locatum verbs account for about a quarter of the entire data. As this category contains hundreds of examples, Clark & Clark (1979) divide them into eight types according to the positional relationship indicated by the parent noun:

(a) On: “oilcloth the table, oil the hinges, paper the wall, lemon-icing the cake, extract-of-beef the bread, tile the floor”

(a') Not-on: “skin the rabbit, feather the goose, shell the peanuts”

(b) In: “spice the food, pepper the food, cream his coffee, gas the car, coal the ship”

(b') Not-in: “pit the cherries, core the apple, bone the fish, brain the man, weed the

garden, milk the cow, juice the orange, pillage the city”

(c) At, to: “Christmas-gift each other, cocktail the dinners, pension the old man”

(d) Around: “fence the yard, wall the garden”

(e) Along: “tree the avenue, fence the street, hedge the road”

(f) Over: “bridge the stream, span the river”

(g) Through: “tunnel the mountain”

(h) With: “trustee the property” (Clark & Clark, 1979, p. 770)

There are also some examples collected from the Internet. (Retrieved January 5, 2012, from <http://www.baidu.com/>)

(22) Bill saddled the horse.

(23) Mum cushioned the chair.

(24) Susan powdered her nose.

(25) The woman skinned the rabbit.

(26) Tom asked his mother to salt the food.

The above examples illustrate one type of conversion from noun to verb as a process in which the moved object provides mental access to the whole action. In example (22), the “saddle” is the theme in the action of putting something on the horse. In this sentence, “saddle” (n.) is converted into a verb. It prompts a scenario of an action of putting something on someplace. Within the scenario, there is a saddle and a horse; Bill put the saddle on the horse. The entity in this scenario is something associated with the act of putting. The word “saddle” involves a distinct semantic relation of movement; it also provides a nominal cue for opening an abstract mental space of event frame representing an act involving agent, the moved object and the goal where the moved

object is finally located. Denominal verb “saddle” suggests a mapping between the abstract mental space and the scenario. There is a mapping between the moved object saddle and the motion of this object, and these two elements are fused together in the integrated space.

In Mandarin, we have only found 27 examples, and these examples can similarly be divided into:

(a) On: “漆 qī paint, 粉 fěn powder, 油 yóu oil, 膏车轮 gāo-chē-lún cream wheel, 瓦房子 wǎ-fáng-zi tile house, 标签 biāo-qiān label, 罩 zhào cap, 粪田 fèn-tián manure field”

(27) 这些 广告 牌 漆 着 各 种 颜色。 (Wei, 2009, p. 33)

zhèxiē guǎng-gào pái qī zhe gè zhǒng yán-sè

these advertising board paint AP various kinds color

These billboards are painted with all kinds of colors.

(28) 中间 油 好 了 大红 福 字。 (Retrieved June 20, 2013, from <http://baike.baidu.com/>)

zhōng-jīan yóu hǎo le dàhóng fú zì

middle oil Complement AP scarlet blessing character

The scarlet character of blessing is already oiled in the middle.

(b) In: “絮 xùwad, 奶 nǎi milk, 楔 xiē wedge, 秧 yāng seed, 植 zhíplant”

(29) 做 了 套 棉 袄 棉 裤, 我 叫 絮 得 厚 厚 的。 (Wei, 2009, p. 33)

zuò le tào mián ǎo mián kù, wǒ jiào xù de hòu hòu de

make AP set cotton coat cotton trousers, I ask wad SP thick thick GEN

I asked for making a cotton-padded coat and trousers.

(c) others: “津贴 jīn-tiē allowance, 补益 bǔ-yì benefit, 营养 yíng-yǎng nutrition, 武装 wǔ-zhuāng arms, 设备 shè-bèi equipment”

(30) 请 她 私下 津贴 你 五 百 元, 弥补 你的 损失。

(Retrieved August 15, 2012, from <http://www.chcj.net/thread-457669-10-1.html>)

qǐng tā sī-xià jīn-tiē nǐ wǔ bǎi yuán, mí-bǔ nǐ-de sǔn-shī

request her privately allowance you five hundred RMB, remedy your loss

You can charge her 500 RMB allowance privately to make up for your loss.

While in Mandarin, this kind of denominal verbs less often occurred, in English, the positional relationship between parent nouns and object are various such as “on, in, over...” etc. In addition, the English denominal verbs can express the negative meaning; while Mandarin denominal verbs don’t have such kind of meaning.

4.1.3 Location For Action

Location verbs represent a pattern of denominalization totally opposite to that of locatum verbs. The parent noun of a location verb denotes a location, rather than the thing being located, which is indicated by the parent noun of a locatum verb. Clark & Clark (1979) have also divided location verbs by prepositions, but here the prepositions have dwindled to only the simplest three: in, on and at, with a few examples of not-on and not-in:

(a) On: “shelve the books, doormat the boots, rack the plates, hook the cups, wait-list the traveler, inventory the goods”

(a') Not-on: “tee off the (goal) ball”

(b) In: “jail the prisoner, headquarter the troops, stable the horse, kennel the dogs, youth-hostel in Europe, tent along the frontier, cellar the wine, garage the car, can the fruit”

(b') Not in: “mine the gold, pod the peas”

(c) At, to: “site the power plant, floor the accelerator, station the troops” (Clark & Clark, 1979, p. 773)

Other examples like: (Retrieved January 5, 2012, from <http://www.baidu.com/>)

(31) We bedded the child down.

“To bed” means to put the child on the bed. This is the metonymy DESTINATION OF MOTION FOR MOTION; “to bed” highlights the destination where the child is put on.

(32) The policeman jailed the prisoner.

The noun “jail” means a righteous institution used to detain people who are in the lawful detention of the government (either accused persons waiting for trial or convicted men serving a sentence). The verb “jail” means confine or to lock up, in or as in a prison. Certainly, here “to jail” is the source-in-target metonymy DESTINATION FOR ACT. “To jail” describes the destination where the prisoner is confined in.

(33) Linda cellars the cabbage for the cold winter.

(34) The pupil desked the papers for her teacher.

The more denominal verbs of this kind contain: “to ground the planes, to beach the boats, to land the boat, to bench the players, to leash the dog, to schedule the appointment, to chart the route, to jail the prisoner, to house the people, to can the fruits, to station the troops, to center the picture, to cradle the baby”, etc.

This type of conceptual metonymy is not very common in Contemporary Mandarin.

For example,

(35) 他 老 是 窝 在 家 里。 (Retrieved July 1, 2012, from

http://gzdaily.dayoo.com/html/2012-07/01/content_1752764.htm)

tā lǎo shì wō zài jiā-lǐ

he always is nest at home

He always stays at home.

Here denominal verbs are considered as DESTINATION FOR ACT. For instance, the verb “窝 wō nest” means to stay, which profiles the destination where the person stays. When it is converted into verb, it can make clear the destination through action.

(36) 把 白菜 窖 起来。 (Wei, 2009, 33)

bǎ bái-cǎi jiào qǐ-lái

function word cabbage cellar complement

to store the cabbage in a cellar

(37) 袖 着 手 (Retrieved January 15, 2011, from <http://zhidao.baidu.com>)

xiù zhe shǒu

sleeve AP hand

have one's hands tucked deep in the sleeves

(38) 他 临 走 还 袋 了 一 匣 火 柴。 (Retrieved

December 20, 2012, from <http://tieba.baidu.com/p/2074332032>)

tā lín zǒu hái dāi le yī jiǎ huǒ-chái

he just before go still pocket AP one pack match

He also pocketed a pack of matches into his pocket just before he went.

Here “窖 jì 窖 cellar, 袖 xiù sleeve, 袋 dāi pocket” all refer to the place or the location where the actions take place. The salient participant here is the places or locations, thus, they are particularly chosen to describe the action itself. These locations are the most salient in the expressions, so these expressions belong to the category-LOCATION FOR ACTION.

4.1.4 Result/Goal For Action

Goal verbs are the goal case of some action the verb denotes. Clark & Clark (1979) offered about 41 examples of goal verbs and classified them into the following types:

- (a) Human Roles: “fool the man, orphan the children, saint the reformer”
- (b) Groups: “group the actors, pod the peas, parade the troops”
- (c) Masses: “pile the money, mass the money, heap the dirt, lawn the grass”
- (d) Shapes: “loop the rope, coil the rope, knot the string, crook his finger, hinge his knee, curl up his toes”
- (e) Pieces: “powder the aspirin, crumb the bread, flake the paint”
- (f) Products: “script the movie, copy the paper”
- (g) Miscellaneous: “sandwich the man between them, cream the butter, flame the pudding, image the scene” (Clark & Clark, 1979, p. 775)

Sometimes the performance of an act will make a change on agent or patient or anything else involved in the event. Since the goal of the change is a newcomer participant in the event, it always attracts our attention. Most of the time, the result is the thing people care about after carrying out the action, so it may also attract the most attention. It is easy to be selected as the input to evoke the whole action. Then we have a sort of noun-to-verb conversion motivated by RESULT/GOAL FOR ACTION

metonymy. Here we have some more English examples chosen from the Internet.

(Retrieved June 5, 2012, from <http://www.baidu.com/>)

(39) to pile the money (to lay the money into a pile)

(40) to monk the man (to make the man into a monk)

(41) to landscape the garden (to make the garden into a landscape)

(42) to cripple (to make...into a cripple)

(43) to crowd (to form or change...into a crowd of people)

(44) The bank will cash your check. (to change your check in cash)

(45) She was widowed and her children were orphaned. (widow: to make a woman to become widow; orphan: to make the children become orphans)

(46) Factories grouped in the south of the city. (to form into one or more groups)

(47) John, powder the pill on the table, please. (to break the pill into powder)

All of the noun-to-verb conversion in the above examples is motivated by the same conceptual metonymy RESULT/GOAL FOR ACTION. For example, in the phrase “to pile the money”, “pile” is originally a noun and it usually serves as the result/goal of the event “to lay something into a pile”. The goal is realized by the noun “pile” provides a mental admittance to the target, i.e. the action of laying the pile. The reason is that in the whole action of piling the money what people concerns most is the goal of the action, or we may say “pile” is the purpose we want to achieve when we perform the action. Since the result “pile” is so important and so salient, it can naturally be selected as the input for the metonymy.

Moreover, in sentence (45), “orphan” is the result of losing their parents, “to orphan” indicates that what have done to cause the result. So this is the metonymy

GOAL/RESULT FOR THE ACTION THAT BRINGS ABOUT THAT ACTION. So we have some other common examples: “fool the man, baby the student, cripple the man, and beggar his opponents”.

Though this kind of denominal verb in Mandarin is not as common as in English, we have classified Mandarin examples into three types:

(a) Human Roles: “大学生 dà-xuéshēng undergraduate, 教授 jiàoshòu professor, 哥们儿 gēmen-ér buddy, 党员 dǎngyuán communist, 配偶 pèiǒu spouse, 太监 tàijiān eunuch”

(b) Shapes: “粉 fěn powder, 沱 tuó bay, 堆 dūi pile, 垛 duò battlements, 团 tuán roll, 辫 biàn braid, 束 shù bundle, 弓 gōng arch, 圈 quān circle”

(c) Products (natural & man-made): “锈 xiù rust, 霉 méi mildew, 淤 yū silt, 碱 jiǎn soda, 备份 bèifèn backups, 牢骚 láosāo complaint”

In Mandarin, the GOAL/ RESULT FOR ACTION Metonymy is a relatively common phenomenon. For example: “片肉 piànròu, to slice meat, to cut the meat into slices/pieces”. The result of this meat is to become a slice or piece. And “谱 pǔ compose” in this sentence:

(48) 把 这 诗 谱 成 歌曲。 (Retrieved December 20, 2012, from http://epaper.nfdaily.cn/html/2009-02/26/content_6730238.htm)

bǎ zhè shī pǔ chéng gē-qǔ

function word this poem compose become song

Compose this poem to be a song.

This kind of denominal verbs belong to the RESULT FOR ACTION metonymy. For example, “谱 pǔ” means “music score” is the product by composing the music.

Then, here “谱” stands for doing something to compose music.

Other examples are in the following:

There are still several examples in the following:

(49) 哪 儿 河 堤 淤 高 了? (Retrieved December 20, 2012, from <http://wenku.baidu.com/view/183ada86d4d8d15abe234e3b.html>)

nǎ-er h é d ī y ū g āo l e

which river levee silt high AP

Which riverbed is silted up?

“淤 yū silt” is a noun denoting the result, it means “silt”, here it is converted to verb meaning “to make something be filled with silt” motivated by the conceptual metonymy RESULT FOR ACTION.

(50) 铁 锤 锈 了。 (*Contemporary Chinese Dictionary*)

ti é ch u í x i ù l e

iron hammer rust AP

The hammer is rusty.

“锈 xiù rust” as a verb refers to the process of the emergency of the rust, while as a noun it refers to the result of the process.

(51) 傍 晚 的 太 阳 椭 圆 起 来。 (Dongmei, 2001, p. 86)

b àng-wǎn de t ài-y áng tuǒ-yu án qǐ-l ái.

dusk GEN sun ellipse complement

The sun at dusk was in a shape of an oval.

Here, after the denominalized process, the noun “椭圆 tuǒyuán oval” changes into a verb which means to become an oval shape. Therefore, the original word has one

result, showing the change of the noun.

4.1.5 Agent For Action

With verbs of agent, the source nouns are in the agentive case, like “jockey the horses”. “Jockey” as a noun can refer to someone who rides horses in races. Here when converted into a verb, it indicates the act that one would normally expect a “jockey” to do to a horse. Clark & Clark (1979) grouped agent verbs into three kinds: Occupations, Special Roles and Animals. However, it is worth mentioning that most examples in the group of Animals are not used metonymically, but metaphorically, such as “fox the people”, “parrot every word”. The four conditions Clark & Clark set for their collection of data and the third one is that denominal verbs which primarily have metaphorical use are excluded from their database. But here apparently, Clark & Clark fail to abide by this condition unconsciously. I do not exclude the metaphorical use of denominal verbs in this study, but that is the part we will discuss later, so here we do not count in the group of animals. Then altogether there are over 110 examples in the other two groups:

(a) Occupations: “butcher the cow, referee the game, nurse the patient, doctor the victim, tutor the boys, captain the destroyer, guard the jewels, police the park”

(b) Special Roles: “partner the host, companion the queen, mother the child, father the child, parent the child, husband someone, wife someone, uncle someone, boss the employee” (Clark & Clark, 1979, p. 774)

Agent is the role in an event or in the occurrence of an action that perform the action, or in other word that makes the action come into being. As a very important role in an event, the noun-to-verb conversion motivated by AGENT FOR ACTION metonymy is very common in English. For example:

(52) to author a new book (to write the book as an author)

(53) The poor farmer butchered the cow for the coming New Year.

In sentence (53), “butcher” is used as a verb that is a metonymy AGENT FOR ACTION. “To butcher” profiles the person who kills animals professionally. Compared to the generic meaning of the verb “to kill”, “to butcher” provides more information.

The following presents some more examples:

(54) to chairman the department (to assume the responsibility as a chairman do)

(55) to tourist the Great Wall (to visit Great wall as a tourist)

(56) to judge a murder case (to make decisions about the case in a law court)

(57) to referee a football game (to make decisions in a game as a referee do)

(58) Soldiers are guarding the president. (to protect the president as a guard)

(59) to doctor the patient (to take care of the patient as a doctor)

In example (59), the noun “doctor” is an agent, who can cure the patient or victim. When it is used as a verb, it is a metonymy AGENT FOR ACTION. “To doctor” attaches great importance on the person who cures the victims professionally. It provides more information than the verb “cure”.

In a similar way, the nouns “author, butcher, chairman, tourist, referee” are the agents in the whole action, but here they are converted into verbs denoting the event itself because these agents play a very important role in the action such as writing a new book, killing a cow, taking responsibility or making decisions in the game. Their skills, their strategies or their interests are crucial to the action of writing a book, killing a cow or visiting a place etc. Therefore, these agents are so salient that they are selected as the input for a mental access to the whole action or event. The AGENT FOR ACTION

metonymy as the cognitive motivation plays a very important role in the process of conversion.

In Mandarin, agent verbs are rare. We have collected 18 examples in total and they can also be classified into:

(a) Occupations: “责编 zé-biān editor, 顾问 gù-wèn adviser, 主任 zhǔ-rèn director, 统帅 tǒng-shuài commander”

(b) Special Roles: “领导 lǐng-dǎo leader, 霸 bà-tyrant, 主 zhǔ host”

(c) Miscellaneous: “流氓 liú-máng bully, 祸害 huò-hài disaster, 哑巴 yǎ-bā dumb person, 广告 guǎng-gào advertisement, 傻瓜 shǎ-guā fool, 相 xiàng appearance, 电 diàn electricity”

An agent of an action utilizes certain kinds of forces (whether physical, psychological or social) upon other participants in a cognitive frame is prominent thus can be used as a cognitive reference point to designate the action itself. In Mandarin, noun-to-verb conversion motivated by AGENT FOR ACTION metonymy has a comparatively low frequency. Many metonymic usages have long been conventionalized in Mandarin to such an extent that most speakers are barely aware of their metonymic origins. Such as,

(60) 统帅 三 军 。 (Retrieved December 28, 2011, from <http://zhidao.baidu.com/>)

tǒng-shuài sān jūn

commander three armies

To command the three armed forces.

In this sentence “统帅 tǒng-shuài captain” is used as a verb which is a metonymy

AGENT FOR ACT. “统帅” profiles the person commanding the army professionally as the crowning military officer. Compared to the generic meaning of the verb “领导 lǐng-dǎo” means to lead, “统帅” provides more information.

(61) 我 灰 了 眼 。 (Retrieved December 28, 2011, from <http://zhidao.baidu.com/>)

wǒ huī le yǎn

I dust AP eyes;

Dust got into my eyes.

(62) 你 怎么 哑巴 了 。 (Retrieved December 2, 2012, from <http://tieba.baidu.com/>)

nǐ zěn-me yǎ-bā le

you why dummy AP

Why are you dumb?

(63) 他 从未 祸害 过 人 。 (Retrieved August 1, 2013, from <http://www.baidu.com>)

tā cóng-wǎ huò-hài guò rén

he never disaster PAM people

He has been never hurts anyone.

Here “灰 huī dust, 哑巴 yǎ-bā dumb, 祸害 huò-hài disaster” are agents of specific actions which are selected as the input for a mental access to the whole action or event. In the above sentences, these denominal verbs mean “to dirt the eyes”, “to be dumb”, “to bring disaster to somebody”.

(64) 你 帮忙 领导 领导 。 (Retrieved December, 2, 2012,

<http://www.siluke.com/0/55/55003/>)

nǐ bāng-máng lǐng-dǎo lǐng-dǎo.

you help leader leader

You should help to lead.

“领导 lǐng-dǎo lead” is originally a noun in Mandarin Chinese means officials in leading positions. Here it has been a verb, meaning to lead other people. Therefore, it acts as a denominaized verb to refer the action meaning.

From these examples, we can see that the parent nouns of agent verbs are in the agentive case in these sentences.

4.1.6 Object For Action

As has been mentioned above, this subcategory of metonymic denominal verbs is one we propose to add for the convenience of comparison. Most English object verbs are about meals and crops.

(a) Meals & Foods: “breakfast, dinner, picnic, banquet, nightcap, liquor, wine, tea”

(b) Crops: “timber off the hills, blackberry in the woods, crab, fish” (Clark & Clark, 1979, p. 780).

(65) We are lunching with the Forsyths today.

“Lunch” is the object for people to eat. “To lunch” can stand for the whole process of having lunch.

(66) blackberry in the woods (to pick blackberry in the woods)

(67) timber off the hills (to cut trees from the hills)

(68) to weed the garden (to remove weeds from the garden)

(69) to dust the room (to remove dust from the room)

(70) to fish at weekends (to catch fish at weekends)

In Mandarin, I have collected about 20 examples of object verbs, and grouped them into the following types:

(a) Meals & Foods: “早餐 zǎo-cān breakfast, 午餐 wǔ-cān lunch, 晚餐 wǎn-cān supper, 欢宴 huān-yàn banquet, 午宴 wǔ-yàn luncheon, 美餐 měi-cān good meal, 便饭 biàn-fàn potluck, 宵夜 xiāo-yè night snack, 素食 sù-shí vegetarian diet, 狗肉 gǒu-ròu dog meat”

(b) Clothes: “鞋 xié shoes, 屐 jī clogs, 西装革履 xī-zhuāng-gé-lǚ suit and leather shoes”

(c) Miscellaneous: “中博 zhōng-bó Chinese Expo, 奥运 ào-yùn Olympic Games, 爱情 ài-qíng love, 磕睡 kē-shuì doze”

Parent nouns are in the objective case in sentences that profile the location of one thing in reference to another. Here are the examples of object verbs in Mandarin:

(71) 梅 请 新 同事 上 茶室 早餐。 (Wei, 2009, p. 33)

Méi qǐng xīn tóng-shì shàng chá-shì zǎo-cān

Mei invite new colleague go teahouse breakfast

Mei invited her new colleagues to go teahouse for breakfast.

(72) 我 是 喝 白 酒 的, 可 也 可 以 香 槟 一 下。 (Wei, 2009, p. 33)

wǒ shì hē bái-jiǔ de, kě yě kě-yǐ xiāng-bīn yī xià

I am drink liquor GEN, but also can champagne one time

I usually drink the liquor, but can also try the champagne.

(73) 他 竟 西 服 革 履 起 来。 (Wei, 2009, p. 38)

tā j òng x ī-fú g é l ǚ q ǐ-l á

he unexpectedly suit leather shoes complement

Unexpectedly, he wore the suit and the leather shoes.

(74) 何 不 游 戏 人 间 ? (Retrieved April 11, 2012, from
<http://tieba.baidu.com/p/1507899963>)

h é b ù y óu-x ì r én-j iān

why NEG game man's world

Why not treat life as merely playing games?

(75) 你 我 夫 妻 一 场。 (Wei, 2009, p. 59)

n ǐ w ǒ f ū q ī y ī chǎng

you I husband wife one round

We used to be a couple.

(76) 喂, 今天 你 博 客 了 吗? (Retrieved August 10, 2013, from
<http://wenku.baidu.com/view/9e933d04a8114431b90dd8bb.html>)

w éi, j īn-t iān n ǐ b ó-k è le ma

hey, today you blog AP MP

Hey, have you written blog today?

(77) 她 就 怕 他们 闲 话 她。 (Retrieved August 15, 2012, from
<http://www.xxsy.net/books/433327/4762312.html>)

t ā jiù p à tā-men xi án-hu à tā

she just afraid they gossip her

She is just afraid that they gossip about her.

(78) 请 到 舍 下 便 饭。 (Wei, 2009, p. 49)

qǐng dào shè xià biǎn-fàn

please arrive house down potluck

Please come to my house and take potluck with me.

(79) 我们 中午 出去 美餐 一顿吧。(Retrieved June 7, 2013, from <http://www.sanwen8.cn/search/724551/>)

wǒ-men zhōng-wǔ chū qù měi-cān yī dùn ba

we noon out go good meal one MW MP

We should go out and have a good meal at noon.

(80) 有些 女孩 选择 素食。(Retrieved June, 26, 2011, from <http://www.chinavegan.com/2011/05/2011052517453181.htm>)

yǒu xiē nǚ-hái xuǎn-zé sù shí

have some girls choose vegetarian food

Some girls choose to be vegetarian.

(81) 孩子, 就是 运气 了你。(Retrieved December, 2, 2012, from http://new.060s.com/center/stalnn/all/t-%253D%253Dw4Evcw4b8yUfsyN7rM4QzN_408495.html)

hái-zi, jiù shì yùn-qì le nǐ

child, exactly luck AP you

Kid, you were lucky indeed.

In these examples, “游戏人间 yóu-xì rén-jiān play game in the world” refers to treat life as playing games, here “游戏 yóu-xì game” is used as a verb in this expression. Similarly, “夫妻 fū-qī husband and wife” here means “to become or make husband and wife”; “博客 bó-kè blog” here means “to write blog”; “闲话 xián-huà gossip” here

means “to gossip or to say others’ privacy”; “便饭 bi àn-fàn simple or ordinary meal”, here it is converted to a verb means “to eat the food”. “素食 sù shí vegetarian food”, here means “to eat vegetarian food”; “运气 yùn-qì good luck” here means to “have good luck”.

In these examples in Contemporary Mandarin, the words are all in the objective case in the expression.

4.2 Comparative Analysis of Metonymy in English and Mandarin Denominal Verbs (Results in Relations to Research Question 2)

Based on the discussion of six types of English and Mandarin denominal verbs, some similarities and differences between Mandarin and English denominal verbs will be explained in the section.

4.2.1 Similarities and Cognitive Analysis

By comparison, we have found the following similarities between English and Mandarin metonymic denominal verbs:

For the instrument verbs, basic instruments account for a large proportion in both groups, and their functions are more or less the same; many nouns that refer to body parts can be denominalized as instrument verbs in both English and Mandarin. Although the above examples of English and Mandarin locatum verbs are not equivalent in amount and variety, we have found some exactly matching pairs:

paint—漆 qī (paint)

oil—油 yóu (oil)

tile—瓦 wǎ (tile)

English and Mandarin location verbs here are matched in variety, as both can be

divided by the three prepositions: On, In, and At.

By comparison of the subcategories of English and Mandarin goal verbs, we have found that most of them are matched with each other. Clark & Clark (1979) have made a more specific distinction of Goal Verbs with a sense of “form”, and classified them into three types: Masses, Shapes, and Pieces. For Mandarin Goal Verbs, we have put all such verbs under the subcategory of shapes, although some of them have corresponding ones in the Type of Masses or Pieces.

Comparing the English and Mandarin object verbs, we have found that many nouns which refer to meals, foods or beverage can be denominalized in both English and Mandarin. Some of the matching pairs are:

Breakfast—早餐 zǎo-cān (breakfast)

Banquet—午宴 wǔ-yàn (banquet)

Liquor—白干 bái-gān (liquor)

Also, denominal verbs can be regarded as morphological processes leading to metonymies. From examples above, it indicates that some metonymies work both in English and Mandarin denominal verbs. First, we take Instrument-Act metonymy in English and Mandarin denominal verbs as a sample to make contrastive analysis. Because of being in the same metonymy, the parent nouns can be used to activate actions. For instance:

(82) a. He hammered the stone. (with a hammer)

b. 他 (用 锤头) 锤 石头。

tā (yòng chuí tóu) chuí shí tóu

he (use hammer) hammer stone

He hammered the stone with a hammer.

In example (82), here “hammer” and “锤 chu íhammer” are instruments in English and Mandarin. Both of them are converted into denominal verbs to mean “to do an act with the instrument of hammer 锤”. This kind of denominal verbs belong to INSTRUMENT FOR ACT.

Now consider this sample, the word “hammer” and “锤 chu íhammer” prompt a typical hammering scenario associated with the sample sentence. Within the scenario, there is a stone and a hammer; “he hammered the stone with a hammer”. The entity represented in this space is something associated with the act of hammering the stone. Moreover, this word also provides the nominal cue for opening an abstract mental space of event frame representing an act involving Agent, Patient and Instrument. Denominal verb “hammer” and “锤 chu íhammer” suggest a mapping between the abstract mental space and the scenario. The conceptual integration of a scenario is construed in the blend involving a salient instrument. The abstract generic space projected from both input spaces includes the information that there is a two-participant structure of an act and the instrument with which the act is performed.

Input Space I	Input Space II
Abstract Event	Specific Hammering Event
Agent	he/他 tā
Act	hammer (v.) 锤 chu í
Patient	the stone/石头 sh ítou
Instrument	hammer (n.) 锤 chu í

Just as there is a close Instrument-Act relation between the act and its instrument,

there is an even closer Instrument-Act relation between hammer (n.) and hammer (v.). This common Instrument-Act topology establishes a close relationship between these two inputs—hammering scenario and abstract event input. These two spaces are analogically linked by the generic structure obtaining from what the inputs have in common.

There is a mapping between Instruments used to hammer and source noun hammer (n.) and these two elements are fused together, hammer (n.) is framed as an instrument. There is a crucial emergent structure in this process: a role Instrument for hammering that is not available from either input. We understand the expression as asking us to put the integrated conceptual packet Instrument-Act in the first frame into correspondence with hammer (n.)-hammer (v.) in the second space. In so doing, we achieved the integration of hammering (abstract event) and hammering (specific event), that is, Instrument-Act and hammer (n.)-hammer (v.).

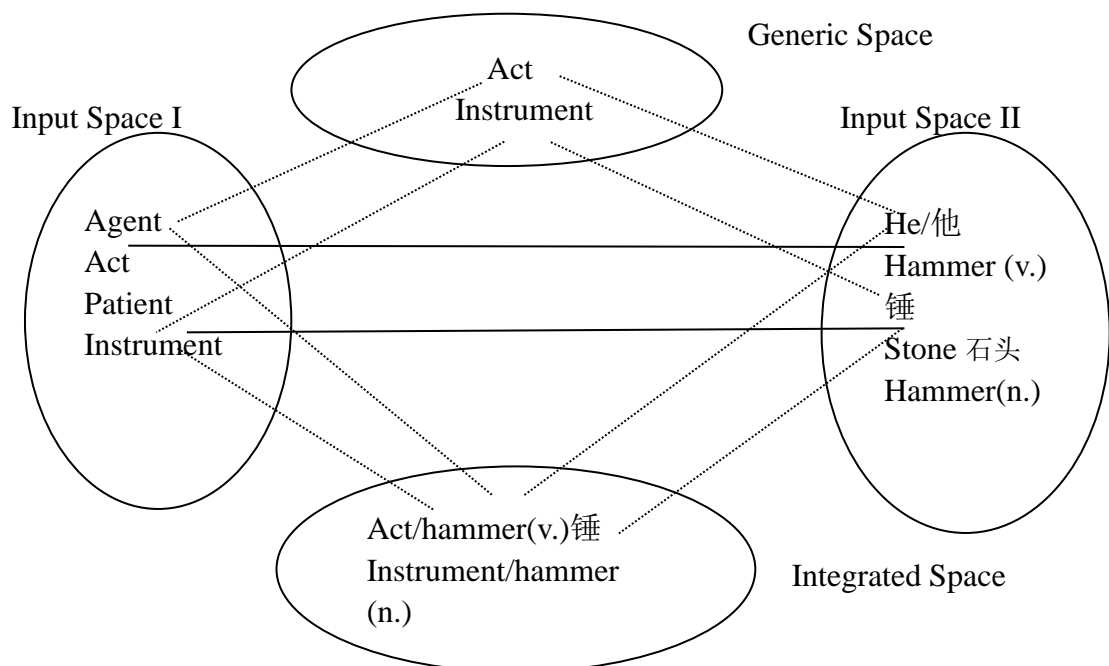


Figure 4.2.1 hammer (n.)-hammer (v.)

Therefore, it is clear that the metonymic meanings of denominal verbs in English and Mandarin have the same metonymy mechanism. It shows that metonymy mechanism commonly work in most denominal verbs of the two languages. Metonymic concepts structure not only our language but also our thoughts, attitudes, and actions. They are embedded in our experiences, which are not random and arbitrary, and we should not treat them as isolated examples. The conceptual metonymy has a cognitive basis. In other words, conceptual metonymy is guided by some cognitive principles.

Human experience is one of the principles. According to Radden & Kovecses (1999), our primary human experiences come from our anthropocentric view of the world and our interaction or communication in the world. In this world, humans take precedence over non-humans; things are looked at from a subjective rather than objective point of view; concrete entities are more salient than the abstract objects; things we interact with are chosen over things we do not communicate with; and functional things are more significant to us than things which are non-functional. Radden & Kovecses (1999) demonstrate these principles as follows: (i) HUMAN OVER NON-HUMAN. (ii) SUBJECTIVE OVER OBJECTIVE. (iii) CONCEPT OVER ABSTRACT. (iv) INTERACTIONAL OVER NON-INTERACTIONAL. (v) FUNCTIONAL OVER NON-FUNCTIONAL. All of the above principles restrain our selection of vehicle and target in the metonymic mappings.

Perceptual selectivity is another cognitive principle. It is the very shift of perspective that makes possible the projection from the one domain to the other by choosing suitable aspects of the source network, and also the source domain, which can be satisfied in the target domain. Perceptual selectivity is closely related to perceptual

salience. Perceptual salience is of great importance to understand a number of cognitive principles which determine our way to experience the world.

According to Radden & Kovecses' (1999) point of view, our perceptual apparatus is geared towards things in our immediacy and presence, things which are large and big, and things which form good gestalts, have clear boundaries and are specific instances, we can state perceptual selectivity as follows: (i) IMMEDIATE OVER NON-IMMEDIATE; (ii) OCCURRENT OVER NON-OCCURRENT; (iii) MORE OVER LESS; (iv) DOMINANT OVER LESS DOMINANT; (v) GOOD GESTALT OVER POOR GESTALT; (vi) BOUNDED OVER UNBOUNDED; (vii) SPECIFIC OVER GENERIC.

It is generally believed that cognitive principles are in some ways universal. For the commonalities of bodily experiences, manner of cognition and daily knowledge, there must be some universal aspects of metonymic models in English and Mandarin, which lead to the similarities of noun-verb conversion in the two languages. That is to say, people's abilities to compose complex concepts and general categories are the same. To some extent, English and Chinese people's experiences of a particular domain are similar.

However, they still have some differences, which will be discussed in the following part.

4.2.2 Differences and Cognitive Analysis

In the instrument verbs, sharp differences are easy to find. First, it is apparent that the variety of English instrument verbs has more words than that of Mandarin ones. In English, instrument verbs come from a wide range, such as vehicles, kitchen utensils or

even places, while in Mandarin; most instrument verbs come from nouns which refer to basic instruments, i.e. typical instruments, and few examples of other types can be found. Secondly, innovative uses of instrument verbs in English appear much more frequently than in Mandarin. As for English Instrument Verbs whose parent nouns denote a kind of transportation, we can find examples like “Greyhound to Sydney, and “747 to London”. “Greyhound” the noun refers to the name of a famous bus company in the USA, and here “to Greyhound” just means “to ride on a Greyhound bus.” In the second example, “747” originally refers to the model number of a kind of plane, and here it is innovatively used to mean “to take a 747 plane.” In English, such innovative examples are abundant. In Mandarin, however, we have only found one corresponding example:

(83) 我们 的士 去 饭店。

wǒ-men d ísh ì qù f àn-di àn

we taxi go restaurant

We go to the restaurant by taxi.

For the above listings of locatum verbs, it is easy to find that English locatum verbs can indicate more locative relations than Mandarin locatum verbs. Many English types are totally absent in Mandarin. And it is also noteworthy that in English some locatum verbs can even denote negative locative relations between the parent noun and the object, such as “Not-on”, and “Not-in” relations. Examples like “skin the rabbit” and “bone the fish” involve not only the transition of part of speech of the parent nouns, but also the transition of their meanings to negative ones. Although these words require more cognitive efforts for understanding, when used in a right context, they would not

affect the communication or even achieve the effect of conciseness and vividness. However, the corresponding examples can hardly be found in Mandarin, which might be accounted for by the differences between English and Mandarin.

Some English location verbs can also indicate negative locative relations as English locatum verbs do, such as “tee off the golf ball”, which means “The ball is NOT on the tee”.

By comparing the subcategories of English and Mandarin goal verbs, we have found that most of them are matched with each other. Clark & Clark (1979) have made a more specific distinction of Goal Verbs with a sense of “form”, and classified them into three types: Masses, Shapes, and Pieces. For Mandarin Goal Verbs, we have put all such verbs under the subcategory of shapes, although some of them have corresponding ones in the Type of Masses or Pieces, like the following pairs:

石灰 放 得 太 久, 已经 粉 了。
sh íhuī f àng de t ài jiǔ, yǐ-jīng f ěn le
lime put SP too long, already powder AP
The lime was placed for a long time and it has become the powder.
powder the aspirin

钱 多 得 可以 堆 起来。
qi án duō de kě-yǐ duī qǐ-l ái
money much SP can pile complement
Too much money can be piled up.
pile the money

It is also worth noting that almost all the instances of English goal verbs are

transitive, which indicates that a significant important feature of these verbs is their factitivity: the shape, entity, form or role indicated by the source noun comes to exist through the action denoted by the verb (Clark & Clark, 1979). For example, in the sentence “John looped the rope”, the parent noun “loop” just indicates a shape that comes into existence due to the action denoted by the denominal verb “loop”. In other words, the final “shape, entity, form or role” that comes into existence is the goal of the action denoted by denominal verb, just as the category name indicates. By sharp contrast, most Mandarin goal verbs are intransitive, such as “大学生 dà-xué-shēng undergraduate, 配偶 pèi-ǒu spouse, and 椭圆 tuǒ-yuán ellipse”.

Comparatively speaking, it is clear that English agent nouns are easier to be denominalized than Mandarin agent nouns. For example, almost all the kinship words in English can be denominalized as agent verbs, like “father, mother, or uncle”. No equivalent cases can be found in modern Mandarin, though in ancient Chinese some do exist. As for English agent verbs whose parent nouns denote a kind of occupation, the occupational words come from a richer resource, like “butcher, nurse, doctor, broker, lawyer, pilot and general”. As we all know, agent and action are closely related to each other by contiguity. So we can use agent to refer to action.

Moreover, according to Table 3.6, some metonymy is particular to English or Mandarin denominal verbs, such as TIME FOR ACT-Duration Verb is particular to English. For example:

(84) We holidayed in France.

The word “holiday” in the example sentence is converted from “holiday (n)”. Still in this sample involves two input spaces. Input Space I is an abstract event frame with

three participants (Agent-Act-Time). Input Space II is a scenario of spending holiday based on the sample sentence, in which “We” presents the Agent and the other two participants are holiday (v.) and holiday (n.). There is a partial cross-space mapping between the input spaces. It connects Agent, Act and Time in one space to “We”, holiday (v.) and holiday (n.) in the other space. The generic space projected from both input spaces includes a two-participant structure of a time and an act when the act is performed.

Input Space I	Input Space II
Abstract Event	Specific Spending Holiday Event
Agent	we
Act	holiday (v)
Time	holiday (n)

The denominal verb holiday (v) suggests a mapping between both input spaces. There is a mapping between time and holiday (v.) and they project onto a single in the integration and therefore fusion. The conceptual integration is construed with a salient time.

In the process, holiday (v.) is framed as spending a time. The emergent structure in the integration involves a denominal verb holiday (v.) that takes the temporal role of spending holidays that does not exist in the generic space or either of the inputs. And the conceptual integration works optimally only if the act and the time can be compressed into one tightly integrated form presenting this word satisfies this integration constraint, because it makes efficient use of the word to present an integrated scene. Moreover, the reason is a result in the construction of a mapping. Thus, the meaning of denominal verb

holiday is understood as “spending holidays”.

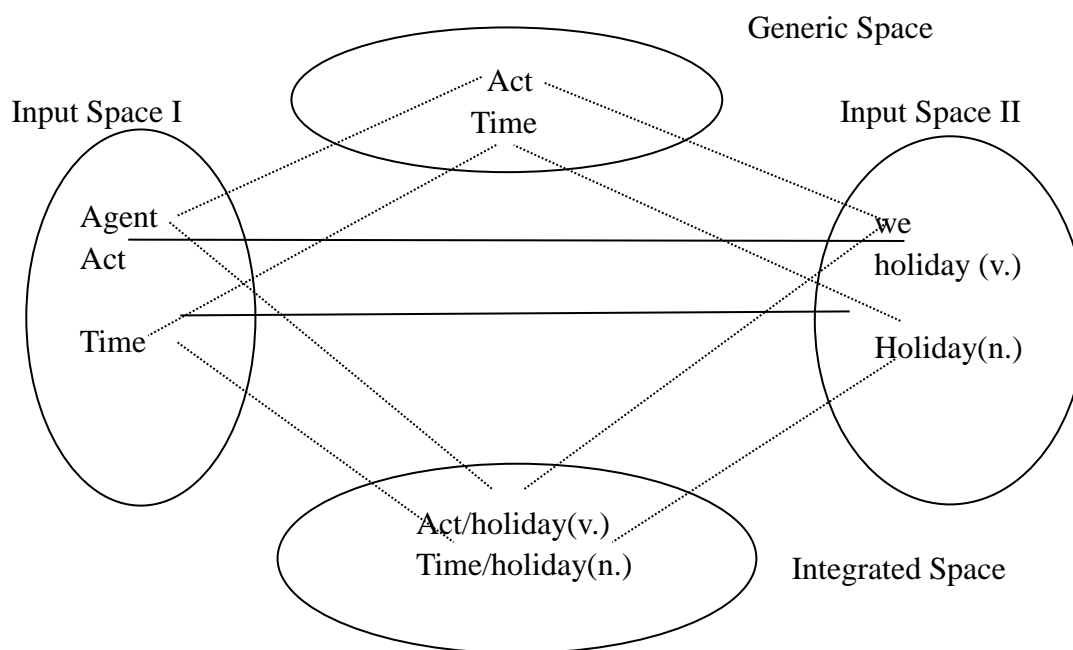


Figure 4.2.2 holiday (n.)- holiday (v.)

In Mandarin, this kind of denominal verbs are vacant. Generally speaking, in modern Mandarin, time is expressed by temporal adverbs which cannot be converted into denominal verbs. This conversion had existed in ancient Chinese but these denominal verbs are less used nowadays. Because of limited scope, ancient Chinese is not discussed in the dissertation.

As stated above, since cognitive principle is generally believed to be universal in some ways, whether the differences result from the violation of cognitive principle is unarguable. The present research tries to explore the reasons of the differences from the point of view of other principle which guide conceptual metonymy, i.e., cultural models. Besides, the reasons for the differences are exploited from the perspective of the principles of language use, i.e., the principle of clarity and the principle of least effort.

According to Radden (2000)’s point of view, cultural models are understood as universally shared patterns of the world and relations in it which affect members of a

society in their understanding of the world and their behavior. Culture and folk models are important to our cognition, because they interconnect distinct phenomenon of the world in a united and elucidative way and hence open up new relationships, which may be exploited by metonymy and metaphor. The choices of vehicles in metonymies can also be influenced by different culture models. For instance, for the same event “going to catch fish in the river with a net”

“去河 边 用 网 钓 鱼

qù hé biān yòng wǎng diào yú

go river bank use net angle fish

Going to catch fish in the river with a net” the two languages are different from each other in selecting the vehicle to provide mental access to the target. In English, there are two ways of adopting conceptual metonymy to express the event, i.e. “to fish in the river” and “to net the fish in the river”. The former one is noun-to-verb conversion motivated by the PATIENT FOR ACTION Metonymy, “fish” is the patient of the action “catching” and here it is converted to a verb meaning “to catch fish”. The latter one is noun-verb conversion motivated by the INSTRUMENT FOR ACTION Metonymy, “net” is the instrument of the action; here it is converted to a verb meaning “to catch fish by net”. The two English phrases are translated into Mandarin like:

a. *到河 里 鱼

dào hé lǐ yú

go river inside fish

to fish in the river.

b. 到河 里 网 鱼

dào hé lǐ wǎng yú

go river inside net fish

to net the fish in the river.

The former sentence is unacceptable in modern Mandarin, while the latter one is a correct Mandarin sentence. From the above examples, we can see that people in the two different languages attach different salience on the participants involved in an event. In English, both the “patient” and the “instrument” bear the same cognitive salience, and then they can be used to stand for the action “catching fish using a net”. In Mandarin, the salience of the patient and the instrument is totally different. Then the most salient participant in the event, the instrument, is used to stand for the action. Similarly, there is sentence as

到 河 里 网 鱼

dào hé lǐ wǎng yú

go river inside net fish

‘to net the fish in the river’ in Mandarin, which is an example of noun-to-verb conversion motivated by the INSTRUMENT FOR ACTION Metonymy.

As far as principles of language use are concerned, two principles seem to contribute to determine the selection of a metonymic vehicle in conversion: the principle of clarity and the principle of least effort.

1) Principles of clarity

The communicative principle that ensures maximal ease accessing the intended target through a metonymic vehicle may be defined as CLEAR OVER OBSCURE.

Examples of metonymy which have a high degree of cognitive motivation, and they do

not seem to require any more effort in directing the reader's attention toward the intended target. For example, in the case “鞭马 biān mǎ whip horse”, a conceptual metonymy is involved, that is, the INSTRUMENT FOR ACTION metonymy. Generally speaking, we do not usually say “用鞭赶马 yòng biān gǎn mǎ use whip to drive horse”. In fact, the use of “鞭 biān whip” as a verb is more vivid and accurate, for “鞭” as the instrument of the action is very salient among other participants. Thus, the hearer or the reader can clearly access the intended target, the action “用鞭赶马 yòng biān gǎn mǎ use whip to drive horse”.

2) Principles of least effort

Cognitive constraints affect the use of human languages, among which the least effort principle is a typical example. The least effort principle is to use the least effort to get the most cognitive results.

For instance, in English phrases like “skin the animal” “bottle the wine”, the words “skin” and “bottle” are converted to verbs meaning “remove the animal's skin” and “put the wine in the bottle”. “Skin” is originally the patient of the action “removing”, and “bottle” is the place or container of the action “putting”. The patient and place are relevant to the action or the whole event, and then they are converted to verbs to stand for the action. This is in accordance with the principle of least effort, because “skin the animal” and “bottle the wine” are much simpler (less effort) than the latter ones.

As a matter of fact, the two principles, the principle of clarity and least effort, are in some ways in conflict with each other. In some circumstances, Mandarin and English may adopt different policy to maintain a balance between the two principles, i.e. principle of clarity and principle of least effort. In English, sentence like “I Christmas

with my parents” is perfectly acceptable. It is a reflection of the principle of least effort.

However, in Mandarin we do not say

“我跟 父母 一起 圣诞

wǒ gēn fù-mǔ yī-qǐ shèng-d àn

I with parents together Christmas

I Christmas with my parents.”

Sentence like

“我跟 父母 一起 过 圣诞

wǒ gēn fù-mǔ yī-qǐ guò shèng-d àn

I with parents together spend Christmas

I celebrate the Christmas with my parents” is much more acceptable in Mandarin in order to be clearer and to relieve the cognitive burden of the hearer.

All these principles and the cultural factors make a distinctive cognitive mode, which influence people’s use of language directly. The comparative analysis of noun-verb conversion motivated by conceptual metonymy in English and Mandarin proves that language is the outcome of cognition. With respect to the reasons or cognitive bases of the similarities and differences, the present study reinforces the claim that metonymic models are not arbitrary but grounded on bodily experiences, daily knowledge and related to cultures, which leads to the differences and similarities of noun-verb conversion in Mandarin and English. On the one hand, with the universality of human cognition, people have the similar metonymic models, since people’s cognitive mode influences people’s use of language directly, so there must be some common features of noun-verb conversion shared by different languages. On the other

hand, people's metonymic models will be influenced by culture: people of different cultures usually choose different parts of one ICM as the vehicle to provide mental access to the target, and they rely on different principles in the selection of the vehicle of the conceptual metonymy.

4.3 Metaphors in English and Mandarin Denominal Verbs (Results in Relations to Research Question 1)

The main function of denominal verbs is to plug the gap of verbs expressions' vacancy and one of the functions of metaphor is also to plug the lexical gap and give a label to or a name to new concepts, new experiences, and new objects.

In section 4.1 we have focused on the metonymic uses of English and Mandarin denominal verbs. However, many denominal verbs that we have collected are not used metonymically, but metaphorically, such as “fox people, and Richard Nixon a tape” in English and “虎着脸 hǔ-zhe-liǎn, tiger the face”, “王熙凤一回 Wáng Xīfèng yī huí, Wang Xifeng one time” in Mandarin. Moreover, some denominal verbs can both be used both metonymically and metaphorically, depending on the specific context. Such cases include:

(85) father the child

(86) father the program

(87) 老 大娘 兜 着 几个 鸡蛋 进 来 了。 (Dongmei, 2001, p. 108)

lǎo dà-niáng dōu zhe jǐ-gè jī-dàn jìn lái le

old lady pocket AP several eggs enter come AP

The old lady came in with a bag of eggs.

(88) 把 他的 私 事 全 给 兜 出来。 (Dongmei, 2001, p. 108)

bǎ tā-de sī shì quán gěi dōu chū-lái

function word his personal affairs whole give pocket come out

His personal affairs were disclosed.

This finding resonates with Goatly's statement in *The Language of Metaphors* (Goatly, 1997, p. 93) that “of the whole set of derived lexical items in the dictionary, there are important subsets which necessarily involve metaphor in their meaning”. These subsets include semantic classes of denominal verbs such as “verbs meaning ‘to behave in the manner of, to act as, to resemble the person, animal or object denoted by the nouns’, e.g. “dog, hog, parrot, shepherd, butcher”. Transitive verbs meaning ‘to cause something to be, resemble the object denoted by the noun’ or ‘to treat something like the noun’, e.g. “sandwich, purse”.

On the basis of data collection, it is revealed that: the metaphors and metonymies, the two main cognitive models operate in English and Mandarin denominal verbs; therefore, metaphor will be addressed in this part.

First of all, based on the theoretic background of conceptual metaphor theory and data collected and discussed previously, a classification of metaphors in English and Mandarin denominal verbs will be made, then I will show how the underlying mechanism of metaphor works in the denominal verbs, lastly, I will move to analyze the similarities and differences in producing and understanding English and Mandarin denominal verbs.

4.3.1 Metaphoric Denominal Verbs Derived from Nouns that Refer to Objects

As for the English data in this group, the examples (89-97) mainly collected from “Google” on December 20, 2012, which include:

(a) Instruments: “screw, dish, rag, pick, bench, chisel, rasp, file, square, hail, tuck, stud, punch, wrench”

(89) a. He screwed me out of the money he owed me.

b. Don’t say so or you will screw her.

Before we analyze the mapping here, something has to be made clearly. The word “screw” is a type of fastener. It has many metaphoric meanings according to the *Collins English Dictionary (10th edition)*. When using a screw, people have to devote their energies to tightening otherwise it will drop. Therefore, this action is somehow equal to putting pressure on others, becoming tenser and tenser. In sentence (89 b), the denominalized “screw” maps the action of putting pressure on someone. Thus this sentence can be denoted as (89 b’): Don’t say so and otherwise you put excessive pressure on her.

And “screw” in (89 a) means “to get by forcing or twisting or by great effort or threats”. Still, noun “screw” means “a type of fastener like a nail but has a raised edge winding round it and a special cut in its top to hold tool, for turning and pressing it into the material to be fastened”. If someone wants to fasten a screw into a material, he needs much energy. Then, what has done during the process of fastening a screw maps to “get something by forcing or twisting or by great effort or threats”.

(90) The two women dished their neighbors.

Here “dish” means “to cause failure of a person or his/her hopes”.

(91) They ragged him about his big ears.

Here “rag” means “to play rough tricks on something or to make fun of something or somebody”.

(92) a. Our roof is carpeted with white snow in winter.

b. He tried to blanket a scandal.

In instance (92 a), the original meaning of noun “carpet” refers to a piece of heavy woven material for covering floors, and the generic meaning of “carpet” is a structure that covers or blanket a sea of something. Here, it is used to mean “to cover the roof with white snow”. Therefore, a projection mapping is involved in the understanding of this sentence. In the source domain, one of the inputs, the critical function of “carpet (n.)” is abstracted and generalized to extend its metaphorical meaning and is mapped onto the target domain “carpet (v.)”. Thus a metaphorical association is established between the function of “a carpet” and the action “to cover the roof”. The concept of “to cover...with a carpet” loses its concreteness and is generalized as “to cover with something”.

The conceptual structure of the above example (92 b) is “he tried to make the scandal unknown to others just like using a blanket to cover something and make it unseen”. The target domain is “to conceal the scandal” and the source domain is “to cover something with a blanket”. Concept that is used to describe “the function of a blanket” is mapped to describe “the way to conceal the scandal”.

(b) Food: “butter, cream, pepper, sandwich”

Denominal verbs denoting food are, not as many as those of animals, but more than those of plants. As for English, we have the following examples:

(93) Don’t think you can butter me up that easily.

The noun “butter” refers to a solid yellow food made from milk or cream that you spread on bread or use in cooking. As a kind of popular food, “butter” has the function of making food tastier. Mapped from that function, “to butter up” here means “to flatter, to say nice things to someone so that they will do what you want.”

(94) The home team creamed the challengers.

Here “cream” means “to defeat completely”.

(95) He was peppered with sharp questions about human rights.

Here “peppered” means “to be questioned successively”.

(96) People are sandwiched with each other in a crowded bus.

(97) The skyscrapers mushroomed here and there in recent years.

In case (96), According to the dictionary and our common sense, “sandwich” is a kind of food which is composed of pieces of bread with cheese and meat in it. It is characterized with the impression of press. In other words, components are crowded together in it. So we can map from the word sandwich to a crowded image. Finally, as it is in the verb position, with transferred designation, the sentence (96) equals the sentence (96'): People are together in a crowded bus like sandwiches. Then as for sentence (97), “mushroom” is used as a denominal verb with the metaphoric meaning of appearing quickly and in large groups. In the dictionary, “mushroom” is some kind of food that is easily found. It has the metaphoric meaning of “many kinds”. Here it means “coming about in a short time with large groups”, which is fit for the context in the sentence. So sentence (97) can be mapped as the following meaning: Skyscrapers are built a lot in a short time like mushrooms sprang up.

(c) Plant: “tree, spruce”

(98) He spruced up for the party. (Retrieved July 16, 2013, from <http://dict.bioon.com/sentence/detail.asp?id=275a222351ae>)

When “spruce” is a noun, it means that light soft moderately strong wood of spruce trees and used particularly for timbers and millwork. Because “spruce” is a kind of coniferous tree, it gives people a neat impression. Then, this feature is mapped onto the verb. Here it is a verb which means “to dress and groom with particular care, in the case of a special occasion”.

(99) The hunter treed the bear with dogs and killed it. (Retrieved December 20, 2012, from <http://dj.iciba.com/treed/>)

“Tree”, as a noun, means “a tall plant with wooden trunk and branches. Usually trees are the living place or hiding place for animals”. Here “tree” is used as a verb means “to chase a bear up a tree with dogs and kill it”.

(d) Clothes: “collar, skirt”

(100) In a bar the policeman said to his colleagues: “I collared his creep.” (Retrieved December 20, 2012, from <http://dict.cn/>)

Here “collar” means “to seize, catch or hold”.

Noun “collar” means “the part of a shirt, dress, or coat, that stands up or folds down round the neck and a band put round an animal’s neck”. Because a collar is around the neck, it is convenient to hold an animal or a person. Then, it can be mapped to “seize, catch or hold”.

(101) The speech was most disappointing; it skirted round all the main questions. (Retrieved September 6, 2013, from <http://dict.youdao.com/>)

Here “skirt” means “to avoid a difficult question or subject that ought to be dealt

with”.

(e) Time/Natural phenomenon: “spring, storm, snow, cloud”

(102) I’ll spring for your dinner tonight since you’ve been so kind to me.

(Retrieved December 20, 2012, from <http://www.docin.com/p-535881402.html>)

Here “spring” means “to pay for somebody”.

The generic meaning of “spring” is the season between winter and summer; the part of the year when leaves and flowers appearing. Here it is mapped to “check out for someone to thank his or her kindness”.

(103) He stormed out of here and didn’t even say goodbye. (Retrieved June 22, 2012, from <http://www.dailymail.co.uk/news/>)

Here “storm” means “to go with violent anger”.

The generic meaning of the noun “storm” is a violent weather condition with strong wind, rain, and of lightning which can bring strong influence on people’s life. For this reason, “storm” can map to people’s emotion and temper, which refers to have violent anger.

(104) He snowed me into thinking that he was one hundred percent honest.

(Retrieved December 20, 2012, from <http://www.docin.com/p-535881402.html>)

“Snow” is atmospheric water vapor frozen into ice crystals and falling to earth. Here “snow” means “to persuade or win the respect of someone, especially by making one sound important”, in this means “to deceive or charm with plausible words”.

(105) Age has clouded his memory; drink has clouded his thinking. (Retrieved June 22, 2012, from <http://zhidao.baidu.com/>)

Here “cloud” means to “make uncertain, unclear, confused, etc”.

There are other denominal verbs from time and natural phenomena nouns with metaphorical meanings like “to date, to frost, to thunder, to wind, to freeze, to mist, to breeze, to haze, to fog, to shower” and so on.

The corresponding Mandarin data of this type include:

(a) Instruments: “梳 shū comb, 兜 dōu pocket, 坑 kēng hole, 钉 dīng nail, 盖 gài lid, 刨 páo blade, 网 wǎng net, 弓 gōng bow, 棒 bàng stick”

(106) 不要 坑 人。 (*Contemporary Chinese Dictionary*)

bù-yào kēng rén

NEG hole people

Don't cheat someone or do harm to one's profits.

The noun “坑 kēng hole” refers to a hole in the ground. The noun can be metonymically denominalized, which means “to put...in a hole”. Obviously, when a person is in a hole, his freedom, or even his life will be deprived of. This point is mapped when “坑 kēng hole” here is metaphorically denominalized to mean “to cheat someone or do harm to one's profits.”

(107) 刨 根 问 底 (*Contemporary Chinese Dictionary*)

páo gēn wèn dǐ

blade root ask bottom

To get to the root of the matter

“刨 páo blade” as a noun refers to a tool with a sharp blade, used for making wooden surfaces smooth. Here it is used as a verb which means to “dig, excavate, or scoop out something, especially something secret.”

(108) 丑 事 想 盖 也 盖 不 住。 (Retrieved December 28, 2011, from

<http://bbs.tianya.cn/post-free-426765-1.shtml>)

chǒu shì xiǎng gài yě gài bù zhù

ugly thing want to lid also lid NEG complement

Don't try to make something bad unknown to other people.

The noun “盖 gài lid” means lid, a kind of instrument for covering the open part of a pot, box, or other containers. Its function of covering is metaphorized here to mean “try to make something bad unknown to other people.”

(109) 今天, 我们 将 把 学 的 内容 梳 一遍。 (Retrieved December 28, 2011, from <http://www.baidu.com/>)

jīn tiān, wǒ-men jiāng bǎ xué de nèi-róng shū yī biàn

today, we will function word learn GEN content comb one time.

Today, we will review what have learned before.

The Mandarin character “梳 shū comb” in sentence (109) is called comb in English. In our daily life, we use a comb to make our hair neat. Here in the sentence its metaphoric meaning is mapped as outlining all the knowledge learnt item by item just like using a comb to be free from being messy. So sentence (109) can be denoted as sentence (109'): to be clear about all the knowledge learnt by looking through them. Here it is metaphorized to review what have learned.

(110) 别 跟 我 兜 圈子。 (Retrieved December 20, 2012, from http://gzdaily.dayoo.com/html/2012-05/25/content_1713316.htm)

bié gēn wǒ dōu quān-zi

NEG with I pocket circle

Do not play a trick on me.

“兜 dōu pocket” is referred to a pocket in the dictionary. We have the use “兜圈子 dōu quān-zi, moving around” which means moving around to and fro. And in the sentence (110), it is this meaning that is mapped by. In other words, moving around back and forth has the metaphoric meaning of avoiding the truth intentionally. Therefore, sentence (110) is denoted as (110'): do not play a trick on me and just tell me the truth.

Generally speaking, denominal verbs denoting instruments are commonly seen in the language use. Similar examples can be found in “板 bǎn board, 兜 dōu pocket, 坑 kēng hole, 钉 dīng nail”.

(b) Natural Elements: “铁 tiě iron, 火 huǒ fire, 水 shuǐ water, 柴 chái firewood, 糠 kāng bran, 泥 ní mud, 瓷器 cíqì porcelain”

(111) 生意 火 起来 了。 (Retrieved December 28, 2011, from <http://www.baidu.com/>)

shēng-yì huǒ qǐ-lái le

business fire complement AP

The business is getting flourishing.

The object “火 huǒ fire”, “fire”, refers to the flames or the light and heat produced when something burns. As fire can bring us warmth, it is often associated with a passionate and flourishing image.

(c) Food: “鱼肉 yú ròu fish meat, 醋 cù vinegar, 菜 cài dish”

(112) 我 不 醋 他。 (Retrieved December 2, 2012, from <http://www.baidu.com/>)

wǒ bù cù tā

I NEG vinegar he

I'm not jealous of him.

The noun “醋 cù vinegar” means “an acid tasting liquid made from malt or wine that is used to improve the taste of food or to preserve it”. To Chinese people, the acid flavor of vinegar is similar to the awful feel when one envies others, so hence comes the expression “吃醋 chī cù eat vinegar”. Here “醋 cù vinegar” is used as a verb to mean “be jealous of”.

(113) 你 再 这 么 磨 菇 下 去 ， 非 误 了 火 车 不 可 。

(Retrieved March 9, 2013, from <http://wenku.baidu.com/>)

nǐ zài zhè-me mó-gū xià-qù, fēi wù le huǒ-chē bù-kě
you again so mushroom complement, wrong miss AP train NEG

If you continue to be so slow, we will definitely miss the train.

(114) 水 平 菜 了 。 (Retrieved May 12, 2012, from <http://www.baidu.com/>)

shuǐ-p í c ài le
level vegetable AP

The competence lacks.

Firstly, as for “蘑菇 mó-gū mushroom”, it is the same concept as the above sentence in English. However, it is endowed with a completely different meaning compared with the English version. Here it refers to time-delaying and slow movement. It shows the great significance of cultural background.

Then, as for sentence (114), it has been into use recently. We also can find such kind of expressions like “菜鸟 cǎi-niǎo green hand” in the Internet. In fact, we can't find any relationship between “菜 cài vegetables” and “green hand” on the surface. After searching, we find such an explanation: there was once a kind of pigeons raised

especially for people's eating needs; later people called them “菜鸽 cài gē pigeons for people's eating needs”, which was finally evolved into a name called “菜鸟 cǎi-niǎo birds for people's eating needs” with no other uses except meeting people's eating needs. So later, it has the metaphoric meaning of a person with no competence. Therefore, the mapping in sentence (114) is clear. It equals to the reference that a person is not competent at doing anything.

Here we can reach a conclusion that as for denominal verbs, either traditional ones or innovative ones, can be traced back to metaphoric mechanism. The same food, once denominalized, can refer to different metaphoric meanings in accordance with the contexts.

(d) Plants: “骨朵 gǔ-duǒ bloom”

(115) 现在 她 给 女人 揭破了 身份 又要 让 位子, 骨朵 着

xi àn-zài tā gěi nǚ-rén jiē-pò le shēn-fèn yòu yào ràng wèizi, gǔ-duǒ zhe now

she give woman expose AP identity again give away seat, bloom AP

嘴 只好 站 起来。(Wei, 2009, p. 97)

zuǐ zhǐ-hǎo zhàn qǐlái

mouth have to stand up

Now her identity is exposed and she has to retreat from her position, she stands up, with her mouth pouting like a bloom.

The above sentence is from a literature book. Here “骨朵 gǔ-duǒ bloom” formerly refers to a bloom, but here it acts as a verb and is endowed with another meaning. As is known to all, “骨朵 gǔ-duǒ bloom” is a special shape of a flower, which is quite like the shape when one's mouth is pouting. Therefore, it is used in this sentence, mapping from

a bloom to a visualized shape and finally forming a denominalized meaning of pouting one's mouth like a bloom.

Both English and Mandarin uses of denominal verbs that refer to plants are obviously less than that of others.

4.3.2 Metaphoric Denominal Verbs Derived from Nouns that Refer to Persons

The use of this group is a relatively special one. Both in English and Mandarin I have found many nouns that refer to persons can be derived to be verbs, among which a large proportion are proper names. It is mainly connected with the big issues or some famous literature works. In English, we have the following examples:

(116) My sister Houdinied her way out of the locked closet. (Clark & Clark, 1979)

(117) We would stand on line and wait for hours, smiling and Uncle Tomming every time a doctor or a nurse passed by. (Retrieved December 12, 2012, from <http://yingyu.xdf.cn/201210/9105166.html>)

In example (116), “Houdini” is a famous magician who is good at escaping from a locked closet. The distinct and well-known feature of this escape artist makes it possible for the word Houdini to be used as a verb here, which means “to escape by trickery”. “Uncle Tom” in example (117) is a well-known literature figure in the U.S. The prototype is a servile black character in a novel written by Harriet Beecher Stowe. Its generic meaning is a contemptuous name for a blackman who is abjectly servile and deferential to Whites. Here, “Uncle Tom” as a verb means “to adulate, fawn on or flatter somebody, just as the way Uncle Tom did”.

Many proper nouns can be converted into denominal verbs in English, especially, persons' names, because they have been endowed into many features and factors

surrounding the person. Other homothetic examples include: “Nixon, Clinton, Lewinsky, shylock”, etc. So such kind of use is closely connected with common knowledge about the name.

Besides the proper names, we have also found several other examples, some being appellation words, some being special roles:

(118) John fathered the plan. (Clark & Clark, 1979, 772)

(119) Tom was constantly mothered by his wife, and resented it. (Retrieved January 3, 2013, from <http://bulo.hujiang.com/menu/13520/item/715289/>)

(120) I have been slaving away for hours to get this report finished. (Retrieved August 15, 2011, from <http://news.bbc.co.uk/sport2/hi/cricket/england/7259548.stm>)

(121) He nursed the garden carefully at the beginning. (Retrieved June 1, 2013, from <http://www.iciba.com/>)

As we know, “father” as a noun means “a male parent of a child or animal, who gives the life to the next generation”. Hence, in example (118), “to father” is metaphorized to mean “to be the first man to put forward a plan, new idea.” Similarly, in example (119), “to mother” does not mean “to be the mother of”, but “to look after or protect someone”, by making use of the similarity between this action and the action that one would normally expect a mother to do. Working on a similar mechanism, in example (120), “slave” means “to work very hard, like a slave”, and in example (121), “nurse” means “to take care of, like a nurse.”

Correspondingly, in Mandarin, we have also found proper nouns that have been metaphorically denominalized, such as:

(122) 这一说 我非得 王熙凤 一下, 讲个故事 给 大家

zhè yī shuō wǒ fēi-děi Wang Xifeng yī xià, jiǎng gè gù-shì gěi dà-jia
this one saying I must Wang Xifeng one time, tell a story give people
解 闷 吧。 (Wei, 2009, p. 34)

jiě mèn ba
divert boredom MP

Thus, I have to be Wang xifeng and tell you guys a story for fun.

(123) 这 女孩, 太 林黛玉 自己 了。 (Wei, 2009, p. 34)

zhè nǚ-hái, tā Lin Daiyu zìjǐ le.
this girl, too Lin Daiyu oneself AP

This girl treats herself as Lin Daiyu.

(124) 如果 你 还 为 传 言 困扰。 至少 先 阿Q 一下: 有 人

rú-guǒ nǐ hái wéi chuán-yán kùn rǎo. zhì-shǎo xiān Ah Q yī-xià: yǒu rén
if you still for rumors bother at least first Ah Q once: have person
议论 比 没 人 议论 好。 (Wei, 2009, p. 19)

yì-lùn bǐ méi rén yì-lùn hǎo
gossip than no person gossip well

If you still get stuck in the rumors. At least use “Ah Q” spirit to comfort yourself: the only thing worse than being talked about is not being talked about.

“王熙凤 Wang Xifeng” and “林黛玉 Lin Daiyu” are both famous characters that Cao Xueqin has created in his classic work *A Dream of Red Mansions*, in which “王熙凤 Wang Xifeng” is treated as a shrewd and talkative character in the novel. What’s more, she seems to have the talent to please everyone, to activate the atmosphere on a public occasion. Therefore, in example (123), the proper name “王熙凤” is verbalized

to mean “act like Wang Xifeng”, especially in terms of her social abilities.” So later it is used as a word to refer to those who share the same characteristics with her. Also “林黛玉 Lin Daiyu” is described as a well-educated and smart young girl who is figured in an extremely pathetic light and she is a sentimental character in the novel. So later it is used as a word to refer to those who are like her. Here in both sentences they are used to denote that people do the same action as what “王熙凤 Wang Xifeng” and “林黛玉 Lin Daiyu” do.

In example (124), “阿Q Ah Q” is a character in Lu Xun’s famous novel *Ah Q Main story*. He is the typical character of “a winner of spirit” who does not face it directly when suffering from humiliation but comforts himself as a winner. Hence, “Ah Q” can stand for the action of comforting oneself to avoid facing the failure.

In Mandarin, we have also found similar examples: “雷锋 lei Feng”—a common soldier of the People’s Liberation Army of China. He was described by propaganda as a selfless and humble person after his death and surely was an idol to numerous people. “柏拉图 Plato”—a great Greek philosopher, mathematician, the student of Socrates, writer of philosophical dialogues, etc. Therefore, such kinds of usage are soaring and can never be neglected in the linguistic world.

Besides, we have found in Mandarin other person nouns that have been denominalized:

(125) 他 装 了 几 十 年 孙 子, 现 在 孙 子 不 下 去 了。

(Wei, 2009, p. 74)

tā zhuāng le jǐ shí-nián sūn-zi, xiàn-zài sūn-zi bù xià-qù le

he pretend AP several decade grandson, now grandson neg complement AP

He behaved obedient for several decades and now he cannot act like that way anymore.

(126) 我们 晚上 小资 一下 如何? (Wei, 2009, p. 68)

wǒ-men wǎn-shàng xiǎo-zī yī xià rú-hé

we evening petty bourgeoisie one time how

How about we enjoying ourselves tonight like the petty bourgeoisie might do?

The noun “孙子 sūn-zi grandson” refers to the grandson. As traditional Chinese culture values the moral character of respecting the eldership, the grandson is expected to be obedient in all aspects. That helps explain the meaning of “孙子” in example (125), which means “to behave obediently, or even humbly.” “小资 xiǎo-zī petty bourgeoisie” is a relatively modern word, which is used to refer to the group of people who are generally well-paid and seek an exquisite lifestyle. In example (126), “小资” is metaphorized to mean “to enjoy oneself like the petty bourgeoisie might do”. Similar examples include: “绅士 shēn-shì gentleman, 淑女 shū-nǚ lady, 匪 fēi robber, 知己 zhī-jǐ bosom friend” and so on.

4.3.3 Metaphoric Denominal Verbs Derived from Nouns that Refer to Animals

From all the collected examples, denominal verbs denoting animals account for the largest part. In English, many animal words can be metaphorically denominalized, here are some examples collected from Internet.

(127) Her little brother apes her behavior. (Retrieved March 15, 2013, from <http://www.bigear.cn/news-26-97196.html>)

(128) He is good at ducking duties. (Retrieved December 22, 2012, from <http://www.sodahead.com/>)

An “ape” refers to a kind of primates with short tails or no tail at all. Apes, just like monkeys, are fond of imitating others’ behaviors. Therefore, “ape” here can be metaphorized to mean “to imitate”. “Duck” is a kind of bird common in our lives, and most ducks are aquatic. When encountering dangers, a duck would quickly drop its head into water, an action that is metaphorically mapped here to mean “to avoid or to dodge (a duty, responsibility etc)”.

(129) He foxed me out of 20 dollars. (Retrieved August 26, 2012, from <http://dict.cn/>)

Here “fox” means “to deceive cleverly or to trick”.

Of course, here “fox” is used as a verb. When “fox” is a noun, it means “a small doglike flesh-eating wild animal with a reddish coat and a wide furry tail”. It is said to have a clever and deceiving nature. Then, because of his shrewdness, it is projected to refer to a person who deceives others by means of clever tricks. Therefore, “to fox”, as a denominal verb, maps to person’s action, which do something with tricks or deceive cleverly.

(130) They said they’d help but they have ratted on us. (Retrieved August 26, 2012, from <http://www.chinabaike.com/english/english/R/1100012.html>)

Here “rat” means “to act in a disloyal way or to break promise”. “Rat” is a long-tailed rodents similar to but larger than a mouse. In the development of English, “rat” has been metaphorized to be a person who is deemed to be despicable or contemptible. Based on this, when “rat” was converted to a verb, the metaphorical meaning of noun can be mapped to “the despicable or contemptible action done by the person”. It is not difficult to find similar examples listed above.

(131) I fished around for the answer but no man seemed to know. (Retrieved August 2, 2013, from <http://www.yuncheng.com/>)

Here “fish” means “to search”.

(132) Stop crabbing about everything and just be patient. (Retrieved May 12, 2012, from <http://www.taxalmanac.org/index.php/User:Uxbym45ez0>)

Here “crab” means “to complain in a bad-tempered way”.

(133) Children always like to parrot every word from adults. (Retrieved June 25, 2013, from <http://linguistlist.org/ask-ling/lang-acq.cfm>)

(134) The young man is dogging the escapee. (Retrieved January 15, 2013, from <http://www.marvunapp.com/Appendix/doctorwh.htm>)

(135) John wolfed the food down. (Retrieved October 12, 2012, from <http://www.dictall.com/st/28/78/28780611D67.htm>)

We are all familiar with the animals mentioned above: “parrot, dog and wolf”. They represent different cultural symbols and denote different metaphoric meanings. In sentence (133), when mentioning a parrot, we all think of many features, such as its flying and speaking abilities. Actually, we first form some conceptions about “parrot” in our brain according to our experience and basic knowledge, then we choose one that is fit for the context-speaking ability here and finally we project it to the target domain: children speak after the adults like a parrot. What is worth mentioning is that the metaphor needs the help of metonymy; otherwise, the denominalization process is impossible. Before the final mapping, we need to make use of transferring from parrot to speaking as a parrot. The other two examples are the same. The “dog” is a running animal. According to the context here, the sentence equals the meaning of the sentence

(134'): The man is running after the escapee like a dog. We map from dog to its running characteristics. The word “wolf” reminds people of a hungry animal. In fact, there are lots of features concerned with it, but we choose the one in accordance with the context as we see the word “food” here. So the sentence equals the meaning of the sentence

(135'): John ate the food quickly like a hungry wolf.

(136) The train snailed along the steep grade. (Retrieved April 5, 2013, from <http://www.iciba.com/snailed>)

In this metaphorical expression, the target domain is the state of the train moving slowly and the source domain is the critical properties of the snail, slowly.

(137) Then a yellow foot shot out and snagged the morsel. The bird wolfed it. (Wei, 2009, p. 19)

As for the example (137), “wolf” as an animal is usually thought as gluttonous and greedy. When it eats something, it usually gorges it. So for the bird, if the speaker uses the conventionally used “eat”, it can have the implication of “eat gracefully, eat slowly, eat fast, or eat fastidiously”. Here the speaker shift a noun “wolf” into a verb, so the birds’ eating manner is concretized in a moment.

Truly, in English many animal nouns can be converted into denominal verbs with metaphorical meanings. Besides denominal verbs from animal nouns listed above, there are others like Other denominal verbs from animal nouns include: “to buffalo, to cock, to crane, to eel, to horse, to monkey, to pig, to snake, to swallow”, etc.

As for Mandarin, we also pick some examples:

(138) 兵 熊 熊 一个, 将 熊 熊 一 窝。 (Wei, 2009, p. 35)

bīng xióng xióng yī-g è jì àng xióng xióng yī wō

soldier bear bear one , general bear bear one nest

It is not serious if a soldier is stupid, but it is vital if a general is stupid.

“熊 xióng bear” refers to a large animal with thick fur that eats flesh, fruit and insects. In Chinese culture, this kind of animal is related with an incapable, nasty or even good-for-nothing image. In example (138), it is used as a verb which means “make incapable”. Besides, in Mandarin “熊” as a verb can also mean “to scold, rebuke”, such as

(139) 我 熊 了 他 一 顿 。 (Retrieved March 2, 2013, from <http://tieba.baidu.com/p/2136670732>)

wǒ xióng le tā yī dùn

I bear AP he one MW

I scolded him.

In our daily life, “熊 xióng bear”, as an animal’s name, is a noun, which emerges in these two sentences several times. We cannot understand the real meaning if we don’t apply metaphorical thoughts to understand these sentences. However, we can apply our deep background knowledge to understand these novel denominal verbs. In other words, we create novel denominal verbs by our deep background knowledge. From the explaining items in dictionaries, we get the basic knowledge about the word “熊 xióng bear”, this is the one hand; while on the other hand, and we know the characteristics of the animal, “熊 xióng bear” in our daily experience. Thus, we apply the noun “熊 xióng bear” in our daily life, such as the former examples. Now, here we use the metaphor theory to explain these examples by our encyclopedic knowledge.

When we talk about “熊 xióng bear”, the image of this animal will emerge in our

thoughts, and then we will think about its particular characters, such as, clumsy, stupid, fierce, dangerous, etc.

In example (139), “熊 *xióng* bear” here means to scold some others.

In example (138), “熊一个 *xióng yī-gè*, to fool one”, “熊一窝 *xióng yī-wō*, to fool all people”, compare with the examples (138) and (139), they have different extending meanings, but they stem from the basic features of this animal—“熊 *xióng* bear”.

The following picture will give a simple and clear explanation of these mapping processes in those examples. It shows the metaphorical mapping from the source domain to target domain, then to the examples.

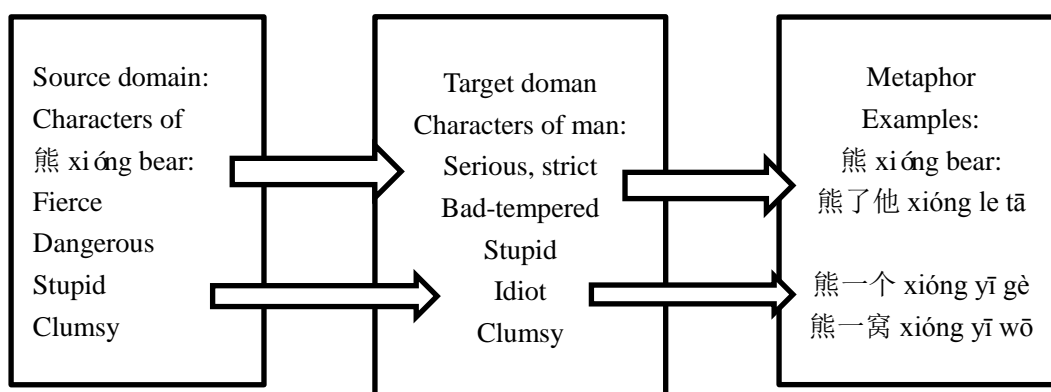


Figure 4.3.3 Metaphorical Mapping of Examples 138, 139

(140) 这些 广告, 一个 牛 过 一个。 (Retrieved January 18, 2012, from <http://www.baidu.com/>)

zhè-xiē guǎng-gào, yī-gè niú guò yī-gè

these advertisements , one cattle than one

These ads are all awesome.

(141) 那 孩子 猴 在 操场。 (Wei, 2009, p. 38)

nà há-zi hóu zài cāo-chǎng

that child monkey in playground

That child was monkeying around in the playground.

(142) 他那 脾气 狗 起来, 真 要 人 命。(Retrieved July 26, 2012, from <http://blog.renren.com>)

tā nà pí-qì gǒu qǐ-lái, zhēn yào rén-mìng

he that temper dog complement, real demand human life

His bad temper drives people crazy.

Here in Mandarin, we find the almost same mechanism in denominalization. For sentence (140), “牛 niú cattle” is some animal that symbolizes superiority in China. It has the metaphoric meaning of “better than”. So here in sentence (140), it equals the meaning of this sentence: Such kind of product is superior to others. We map from the animal to something that has the metaphoric features of it, together with the application of transferred designation. The same can be applied to sentence (141) and (142). The animals “猴 hóu monkey” and “狗 gǒu dog” in sentences above have the metaphoric meaning of naughty and fierceness respectively. When denoting the meaning, such kind of mapping is chosen as projected to a child’s behavior and a man’s temper.

What is worth mentioning here is that unlike the former examples, we have found different or even opposite metaphoric meanings of the same animal between English and Mandarin. “Dog” is a friendly and faithful symbol in English while in Mandarin it is always connected with unfavorable connotations.

Besides the examples listed above, we have also found “猴 hóu monkey, 龟 guī tortoise, 马 mǎ horse, 虎 hǔ tiger, 狗 gǒu dog, 狼 láng wolf” and so on being metaphorically denominalized.

4.3.4 Metaphoric Denominal Verbs Derived from Nouns that Refer to Human Body Parts

From the data sources, we have found many denominal verbs which denote human bodies.

In English, the examples include:

(143) a. He tried to stomach the insult. (Retrieved December 20, 2011, from <http://news.yahoo.com/underweight-college-student-cant-stomach-dads-insults-050107280.html>)

b. How can you stomach the violence in the film today? (Retrieved June 26, 2012, from <http://idioms.thefreedictionary.com/stomach>)

c. I could not stomach his jokes. (Retrieved December 20, 2011, from <http://www.dailymail.co.uk/sport/football/article-473018/Robbie-Savage-vile-joke-I-stomach.html>)

(144) shoulder the responsibilities. (Retrieved August 15, 2012, from http://dictionary.cambridge.org/dictionary/british/shoulder_4)

It can be figured out with little efforts that “stomach” in example (143) means “to accept or bear something, especially something unpleasant” if we relate it with the generic meaning of “stomach” the noun, which refers to the organ inside the body where food begins to be digested. Therefore, the food is whether fit to person or not, stomach is to react firstly. Because of its function, it is mapped to accept or bear without displeasure.

“Shoulder” as a part of the body is the place where the load is usually put on when

a person has to take something. Naturally it can be mapped to mean “to assume responsibility, duty, etc.”

(145) I’ve got to hand it to him: I never thought he would do as well as he did on the mathematics examination. (Retrieved June 26, 2012, from <http://dict.cn/>)

Here “hand” means “to put thumb to somebody or to praise somebody”.

(146) The teenage couple parked the car in an out-of-the-way place and necked. (Retrieved February 20, 2012, from <http://www.e-reading.biz/bookreader.php/>)

Here “neck” means “to kiss each other”.

(147) He tried to elbow in on the conversation but she kept talking and didn’t give him a chance. (Retrieved May 6, 2013, from <http://www.yuncheng.com/reader/>)

Here “elbow” means “to interrupt somebody or to get a word in other’s speaking”.

(148) The old lady likes nosing into other people’s affairs. (Retrieved June 5, 2012, from <http://dict.cn/>)

Here “nose” means “to search or inquire in a meddlesome way”.

(149) The achievement he made heads the world record. (Retrieved June 5, 2012, from <http://dict.youdao.com/m/record/>)

“Head” is the top part of a human body, thus it is with no doubt that it has the metaphoric meaning of being the top one. In sentence (149), the noun “head” maps the target domain of the “top”. Then after the transferred designation, sentence 149 equals the meaning: The achievement he made is on the top of the world record.

Besides those nouns mentioned above, there are many human body-part nouns converted to denominal verbs with metaphorical meanings like “back, thumb, foot, heel, head a delegation, nose for information, bosom somebody, face difficulties”, etc.

In Mandarin, we have only found two examples in the Internet:

(150) 他 光 明 正 大, 没 什 么 背 着 你 的 事。 (Retrieved December 22, 2012, from <http://www.17k.com/book/>)

tā guāng-míng zhèng-dà méi shén-me bēi zhe nǐ-de shì

he frank righteous, no anything back AP your thing

He is frank and righteous with nothing to hide from you.

(151) 天 塌 下 来 有 我 顶 着。 (Retrieved June 4, 2011, from <http://article.hongxiu.com/a/2008-10-4/2874640.shtml>)

tiān tā xià-lái yǒu wǒ dǐng zhe

sky collapse come down have I head AP

If anything happens, even when the sky falls, I will shoulder it.

In sentence (150) and (151), two human parts are listed, one is called back and another is called the top head in English. “背 bèi back” is the part of a person’s or animal’s body that is the side opposite the chest, and goes from the neck to the bottom of the spine or the tail. We all know when something is behind the back, it is hidden and in private. So here “背 bèi back” is mapped into privacy. And sentence (150) can be denoted in English as this one: There is nothing to hide. It can map to mean “to evade or to cozen”.

The word use in sentence (151) is similar to the other example, but the connotations are quite opposite. In sentence (151), “顶 dǐng head” is the top part of a person’s body, so that if something falls from a higher place, “head” is the first part that it touches. Therefore “顶 dǐng head” is metaphorized to mean “to bear, to stand up to”.

From the above analysis, we have found out that in spite of the same metaphoric

mechanism, some are endowed with different cultural connotations.

4.3.5 Metaphoric Denominal Verbs Derived from Nouns that Refer to Places

Denominal verbs denoting places can be found in many examples. As for this group, we have found several English examples:

(152) a. When he told me I was fired, I was floored. (Retrieved July 4, 2013, from <http://www.reddit.com/>)

Here “floor” means “something happening out of expectation”.

The generic meaning of “floor” is the surface on which one stands indoors or surface nearest the ground. “Floor” can be associated with the ground. Then, “floor” can be mapped to “down to the ground”. Down to ground can be metaphorized to be a failure or be dumbfounded.

b. He was completely floored by two of the questions in the exam. (Retrieved August 23, 2011, from <http://dict.youdao.com/>)

The original word “floor”, refers to a lower horizontal surface. Here when used as a verb, it means “to beat”. Just imagine what it is like when one is defeated by another in a boxing match: lying down on the floor. Therefore, it has the metaphoric meaning of “beating”. Then the sentence (152 b) can be denoted as this sentence: He did not know how to solve two questions in the exam and was defeated by them.

More examples are presented as follows:

(153) The people of that country might be Rwandaed because of the crises of their country. (Retrieved January 28, 2013, from <http://www.independent.co.ug/>)

Here “Rwandaed” means “to get stuck in poverty”.

(154) The boy was shanghaied into going to Chicago. (Retrieved December 18,

2011, from <http://wenku.baidu.com/view/762e01ef172ded630b1cb6eb.html>)

Here “shanghai” means “to trick or force into doing something unwillingly”.

(155) Her mother schooled her little kid at home. (Retrieved April 20, 2012, from <http://www.docin.com/p-372271307.html>)

“School” is a place where people receive education. However, in (155), it means that her mother educates her daughter at home as if it were a school.

As for Mandarin, we have the following three examples.

(156) 楼里 有几位 同学 经历 与 她 相似, 大约 都是

lóu lǐ yǒu jǐ-wèi tóng-xué jīng-lì yǔ tā xiāng-sì dà-yuē dōu shì

floor in have several schoolmate experience and she similar, about all are

在她们 出来 读 硕士 的 时候, 丈夫 耐 不 住 寂寞,

zài tā-men chū-lái dú shù-è-shí de shí-hòu, zhàng-fū nài bù zhù jì-mò,

in they come out read master SP time, husband endure don't stay loneliness,

与 别 人 花 前 月 下 去 了。 (Wei, 2009, p. 95)

yǔ bié rén huā qián yuè xià qù le

with other person flower front moon down go AP

Several schoolmates in the flat have experienced the same as her: during their further study to get the postgraduate degree, their husbands were not able to endure loneliness and did extramarital things.

“花前月下 huā-qíán-yuè-xià, the scene of the moon in the sky and the flowers blooming around” is a Chinese idiom which literally means “a place with flowers around and the moon above”. Actually, it is an imagined picture. It refers to a splendid and romantic life here in the sentence 156. “花前月下” and romantic life have the

common aspects and are mapped with each other through conceptual metaphor. So here it is a denominalized metaphor and it is mapped onto doing extramarital things. Actually, it is often used figuratively to mean “an ideal place for a couple of lovers”.

(157) 我 以为这 一回 她 会 写 得 很 花 哨, 大 玩 现 代 派,

wǒ yǐ-wéi zhè yīhuì tā huixiě de hěn huā-shào, dà wán xiàndài-pài,

I thought this one time she will write SP very gaudy, big play modernism,

狠 狠 的 “英 国” 一 回。 (Dongmei, 2001, p. 93)

hěn-hěn-de yīng-guó yī-huì

severely England once

This time I thought she would lavish her words in a typical way of modernism in England.

(158) 他 被 人 给 坑 了。 (Retrieved October 2, 2012, from

http://news.ifeng.com/gundong/detail_2012_10/01/18022165_0.shtml?_from_ralate)

tā bèi rén gěi kēng le.

he by people give pit AP

He was cheated by others.

“坑 kēng pit” is defined as a pit or a hole. We all know that if one falls into a pit, it is a terrible and unlucky experience. Here the original noun “坑 kēng pit” has the metaphoric meaning of cheating or playing a trick on someone. With the help of transferred designation, sentence (158) is denoted as this: He was cheated by someone else.

More examples are “中国 zhōng-guó China, 城市 chéng-shì city, 农村 nóng-cūn village”.

4.4 Comparative Analysis of Metaphor in English and Mandarin Denominal Verbs

(Results in Relations to Research Question 2)

4.4.1 Similarities and Cognitive Analysis

The similarities of English and Mandarin metaphoric denominal verbs can also be generalized into following points:

First, we have found that nouns that refer to persons, animals, objects, human body parts and places can be converted into verbs and commonly extended with metaphorical meanings in the two languages.

From the English and Mandarin data in this group, it is clear to see that various kinds of objects can be denominalized in both English and Mandarin. In some cases, English denominal verb and its Mandarin counterpart have been mapped onto the similar features of their parent nouns. Consider the following two sentences:

(159) Police are combing the woods for the missing children.

(160) 今天，我们将把学的内容梳一遍。

jīn tiān, wǒ-men jiāng bǎ xué de nèi-róng shū yī biàn
today, we will function word learn GEN content comb one time.

Today, we will review what have learned before.

As we all know, “comb” is an instrument used for tidying, arranging, or straightening the hair. In example (159) “to comb” means “to arrange for a place to be thoroughly searched”, and in example (160) “梳 shū comb” means to make our thoughts clear.

Second, in both English and Mandarin, it is very common to convert proper nouns

into verbs, there exists the phenomenon of denominalizing proper names that refer to famous literature figures, such as “Shylock, Uncle Tom”, 王熙凤 Wang Xifeng , 阿 Q Ah Q” , or noted celebrities, like “Nixon, 雷锋 Lei Feng”. And those persons that the proper names refer to all have distinct characteristics, which make it easier to denominalize the nouns to mean the specific actions in relation with the characteristics. Because proper nouns generally have certain background when they appear, the background is the mutual knowledge among certain community. People are familiar with what have done by the characters in the novel, which has become a part of culture in the respective of society. The known features of the heroes in novels are projected onto the target domain, in the metaphorical forming of the verb, thus their denominal verbs; to mean that a person is doing the thing similar to what the heroes have done in a certain context. Then, these proper nouns in novels have been mapped on the metaphorical meanings.

It is obvious that denominalizing animal words is a common phenomenon both in English and Mandarin, as animal words usually have rich connotations, which originate from people’s cognition of the living, eating, or other features of animals. Sometimes that cognition in English and Chinese cultures agrees with each other, while sometimes it differs. Coincidentally we have found a matching pair:

(161) 他 吃 东西 真 狼 虎。

tā chī dōng-xī zhēn lánɡ hǔ

he eat stuff real wolf tiger

He wolfed down his food.

(162) to wolf down one’s food

“狼 láng wolf” is considered as a kind of fierce and greedy animal both in English and Chinese cultures, and here its characteristic of being greedy is being mapped to describe the action of eating. English and Chinese cultures also share their cognition of animals such as “monkeys, fish and foxes”.

This point shows that similar mechanism of metaphorical mapping can work in English and Mandarin denominal verbs. The features of the parent nouns’ referent, which are fit to be shifted to actions, are projected onto denominal verbs, for this reason; the original meanings of them are extended to metaphorical meanings.

The process of the conversion from nouns to verbs is actually the process where the way referring to one thing is used to refer to another. Through mapping, denominal verbs’ metaphorical meanings have been realized and the features and knowledge of nouns have been projected. As we know, metaphor can be seen as an approach whereby ever more abstract and intangible areas of experience can be conceptualized in light of the familiar and the concrete. Then, the general idea of how metaphorical mapping and conceptual work in denominal verbs can be illustrated by Figure 4.4.1.

Through the examples and the figure, it shows that the mapping process is going on in the following way: firstly, the features of nouns are abstracted to extend their metaphorical meanings, and then some specific metaphorical meanings are chosen, which are able to be converted into an action, to be mapped onto denominal verbs. Therefore, we can draw the conclusion that mapping plays an important role in the metaphorical phenomena which often occur in denominal verbs. In this way, denominal verbs plug the gap of nouns, which makes nouns full of action. Meantime, denominal verbs make language vivid and economical. Mapping is the important working

mechanism for metaphors in English and Mandarin denominal verbs.

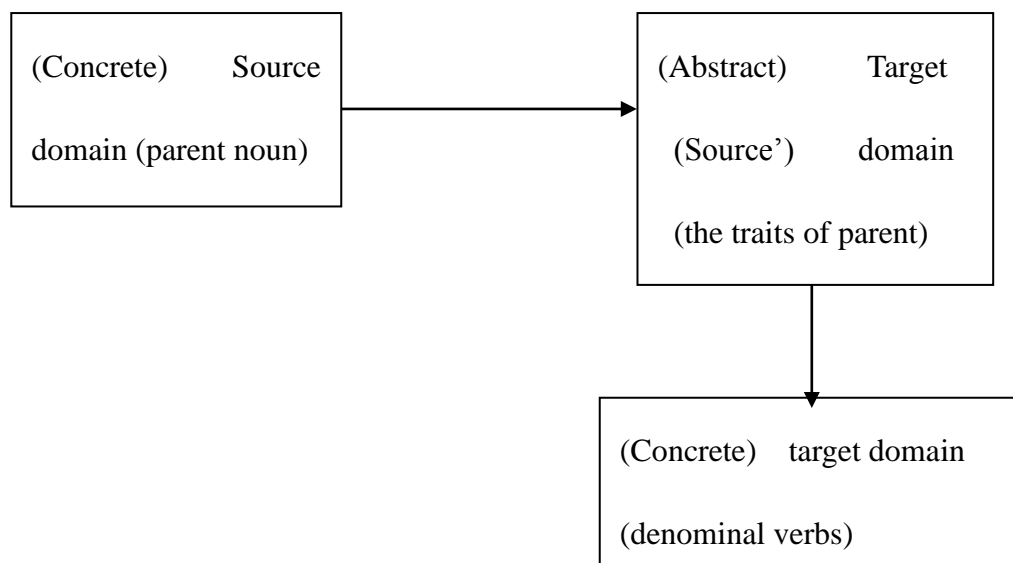


Figure 4.4.1 mappings in conversion

(The arrows stand for the direction of mapping.)

Besides similarities, English and Mandarin denominal verbs have some differences, which will be interpreted in the next section.

4.4.2 Differences and Cognitive Analysis

Due to the different language systems contained, English and Mandarin must be affected by various factors like culture, grammar and so on. That is, the differences existing in denominal verbs of English and Mandarin are inevitable. The words have the different cultural connotations, so the directions of projection may not be the same.

Most metaphoric denominal English verbs in the group of referring to persons are transitive, like “The mayor tried to Richard Nixon the tapes” (Wei, 2009, p. 79) while almost all corresponding Mandarin ones are intransitive.

In many cases, due to historical, geographic, social or other reasons, the connotations of an animal word differ in English and Mandarin. For example, “to crab”

means “to complain in a bad-tempered way” in English, while “螃蟹 pánɡ-xiè crab” is an image which has nothing to do with complaint at all in Mandarin. In Mandarin, we have words like “草鸡 cǎo-jī chicken” means “become inactive, depressed or frustrated”, whereas in English culture “chicken” is not associated with such an image.

Some parent nouns share the same meaning in English and Mandarin, but when they are shifted to verbs, they have different metaphorical meanings. For example, “girdle” and “带 dài girdle” refer to the same thing in English and Mandarin Chinese, but when it converted into noun, it has different meaning in the two language. In English, it means “to surround” whereas in Mandarin it means “to carry” or “to bring”. Also, we take human body part nouns for examples. “Back” and “背 bèi back” refer to the same part of human body in English and Mandarin. But the traits of them are elicited differently. In English, the feature of shoulder is chosen, so “to back” means to support somebody or something, however; the feature of the unseen side is abstracted in Mandarin, so “背 bèi back” means to keep something secret from somebody. For this group of data, the English part obviously exceeds the Mandarin part in quantity. Almost all the words that refer to human body parts in English can be denominalized to mean a certain metaphoric action. In fact, many of the denominal verbs in this group are idiomatic expressions, such as “nose for” which means “to pry”, and “back up” which means “to support”. But it is worth noting that several Mandarin characters that refer to human body parts do have metaphoric references, though they cannot be metaphorically denominalized. For example, “头 tóu head” can mean the leader of a group, and “面 miàn face” also has the indication of confronting something, though mostly used in the phrase “面对 miàn-duì to confront”.

Besides, we can tell that location words are easier to be metaphorically denominalized in Mandarin than in English. And in this group, the relationship between the English denominal verbs and their parent nouns can be really loose. For example, “coast” as a verb means “to do something without using any effort or power”, which seems unrelated with its meaning as a noun. In Mandarin, when the location nouns are denominalized, the typical characteristics of a place will be mapped, and the mapping is usually based on a holistic impression of that place.

From the examples listed in previous sections, it is easy to know that some kinds of denominal verbs are unique to have the metaphorical meanings in English. Their parent nouns are time and natural phenomena, plant, food, appellation and clothes nouns. However, those kinds of nouns as appellation, natural phenomena and clothes converted to verbs can be found in ancient Chinese, but there were no metaphorical meanings with them. For instance, an appellation noun is converted into denominal verb:

“年 岁 虽 小， 可 师 长 兮。”

nǐ nián-suì suī xiǎo, kě shī-zhǎng xi

year age although younger, may teacher MP

Although someone is young, he still can teach the old.

Here, the noun “师长 shī-zhǎng teacher” is converted to the verb which means “to act as a teacher”. Whereas, “nurse” in “Sally nursed the garden” is converted to be a verb, it is mapped on the features of nurse as to care something. Therefore, here “nurse” is metaphorized to manage and tidy. Truly, denominal verbs from appellation nouns are mostly involved in metonymy firstly. Based on metonymic meanings, the metaphorical meanings are produced. This kind of denominal verbs are mostly involved in

metonymic thinking.

Of course, denominal verbs have been mapped from different aspects in English and Mandarin, which still indicates that metaphorical mapping, the working mechanism, is indispensable in the course of nouns converted to verbs with metaphorical meanings.

Furthermore, metaphors in English and Mandarin denominal verbs are fit to the conceptual integration. The understanding of any semantic unit cannot be separated from relevant knowledge of a certain cognitive frame. The concept of denominal verb expression and the source concepts of a thing have a close connection of in terms of meaning. In this way, denominal verbs in everyday language use can produce many metaphors. Denominal verb and source noun belong to a certain cognitive frame of event which serves as a conceptual framework in which denominal verb takes place. A denominal verb derives its meaning by activating pre-conceptual structure of the source noun in a way that creates a new structure. The cognitive process of denominal verb expression is a process of conceptual integration in human cognition.

4.5 Conceptual Images of Metonymic Denominal Verbs

Conceptual Images of Metonymic Denominal Verbs (Part for Whole)			
	Types of Metonymy	Examples	
		English	Mandarin
1	Object Stands For Motion	paper, paint, jam, <u>blanket</u> the bed, <u>paint</u> the ceiling, <u>saddle</u> the horse, <u>wool-carpet</u> the floor	粉 fěn powder, 奶 nǎi milk, 设备 shè-bèi equipment, 津贴 jīn-tīe allowance
2	Destination Stands For Motion	bank, <u>land</u> the planes, <u>shelve</u> the books, <u>headquarter</u> the troops, <u>kennel</u> the dog	袖 xiù sleeve, 兜 dōu pocket, 盆 pán basin
3	Time Stands For Action	summer, vacation, Christmas, <u>summer</u> in France, <u>winter</u> in California	---
4	Agent Stands For Action	butcher, referee, tutor, mother, baby, <u>butcher</u> the cow, <u>jockey</u> the horse, <u>nurse</u> the patient	顾问 gù-wèn consultant, 流氓 liú-máng rascal, 领袖 lǐng-xiù leader, 主 zhǔ host
5	Result Stands For Action	fool, orphan, <u>fool</u> the man, <u>widow</u> the woman, <u>pile</u> the money, <u>powder</u> the aspirin	碱化 jiǎn-huà basification 谱 pǔ compose 牢骚 láo-sāo complaint, 锈 xiù rust 圈 quān circle
6	Component Parts of A Whole Stands For Action	piece, word, <u>piece</u> the quilt together, <u>word</u> the sentence	磁 cí magnetic, 锡 xīn tin
7	Instrument Stands For Action	buick, nail, taxi, <u>mop</u> the floor, <u>knife</u> the man, <u>bomb</u> the village,	的士 d ísh ì taxi, 鞭 biān whip
8	Object Stands For Action	lunch, blackberry	便饭 bi àn-f àn potluck, 谬论 mi ù-l ùn fallacy, 手术 shǒu-shù surgery

4.6 Conceptual Images of Metaphorical Denominal Verbs

Conceptual Images of Metaphorical Denominal Verbs (A Is B)			
	Types of Metaphor	Examples	
		English	Mandarin
1	Higher-order Attributes & Behavior Are Humans	Houdini, Napoleon	王熙凤 Wáng Xīfèng, a shrewd and talkative character in the novel, 柏拉图 Bó Lātú Plato
2	Instinctual Attributes & Behavior Are Animals	fox, rat, cock	熊 xióng bear, 牛 niú cow
3	Natural Physical Attributes & Behavior Are Human Body Parts	nose, elbow, head	背 bǎi back, 头 tóu head
4	Functional Nature Are Instruments	screw, nail	梳 shū comb 兜 dōu pocket
5	Biological Properties Are Plants	tree, spruce	骨朵 gǔ-duǒ bloom
6	Locational Properties Are Places	floor, Manhattan	坑 kēng pit

4.7 Results in Relations to Research Question 3

In the preceding sections, I have discoursed upon metonymies and metaphors in English and Mandarin denominal verbs in light of metonymy and metaphor theory. It reveals a fact that in the course of metonymy and metaphor operating in English and Mandarin denominal verbs, there are other cognitive models working at the same time. Therefore, with a consideration of the data collected and the two cognitive models already discussed, I found that producing and understanding mechanisms of English and Mandarin denominal verbs can be expatiated by adopting other cognitive models in the framework of cognitive linguistics, namely, basic-level categories, profiling, summary and sequential scanning. Therefore, the major aim of this part is to interpret the cognitive mechanisms of English and Mandarin denominal verbs by employing these theories.

4.7.1 Basic-level Categories and English and Mandarin Denominal Verbs

If we make a careful analysis of the previous study and data collection, it is easy to find that parent nouns of denominal verbs in English and Mandarin tend to occur on the basic-level categories.

Here we take animal and instrument denominal verbs as examples:

- (163) a. to dog his footsteps *to courser one's footstep
 b. to fish out a coin *to goldfish out a coin
 c. to pig in an old hut *to boar in a house
 d. to chicken out *to pheasant out
 e. to nail the paper on the wall *to steel-nail the paper
 f. to knife the man *to dinner-knife the man

g. to <u>glue</u> the envelop	*to <u>stationery</u> the envelop
h. to <u>bayonet</u> the enemy	*to <u>weapon</u> the enemy
(164) a. 把 镜框 <u>胶</u> 上。	*把 镜框 <u>强力胶</u> 上。
bǎ jìng-kuàng jiāo shàng	bǎ jìng-kuàng qí lìng-lì jiāo shàng
FW picture frame glue on	FW picture frame super-glue on
to glue the picture frame.	to super-glue the picture frame.
b. <u>漆</u> 课桌。	* <u>红漆</u> 课桌
qī kè-zhuō	hóng qī kè-zhuō
paint desk	red paint desk
to paint desk	to red paint desk
c. 窗户 <u>钉</u> 上。	*窗户 <u>钢钉</u> 上。
chuāng-hù dīng shàng	chuāng-hù gāng-dīng shàng
window nail on	window steel-nail on
to nail the window	to steel-nail the window
d. 在家 <u>猫</u> 着。	*在家 <u>雌猫</u> 着。
zài jiā māo zhe	zài jiā cí-māo zhe
at home cat AP	at home female cat AP
to stay at home like a cat	to stay at home like a female cat

Notes: Sentences marked with*are illogic and unacceptable.

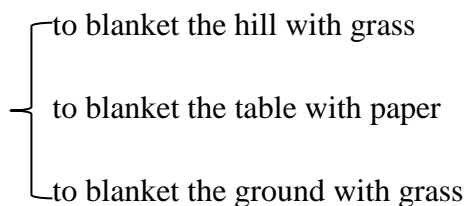
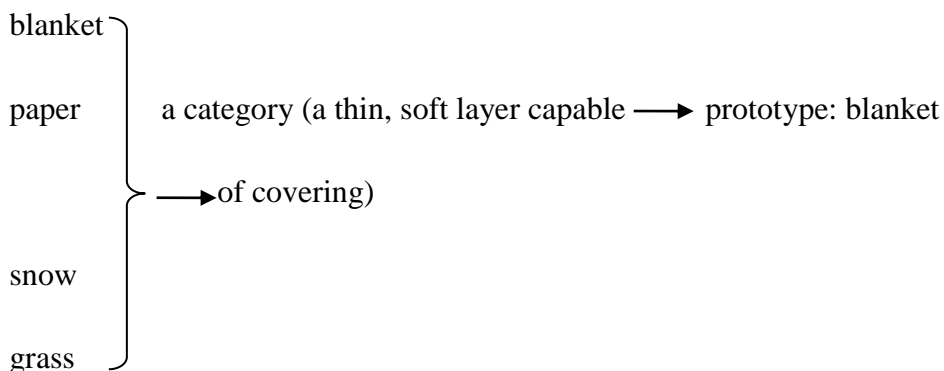
On the whole we are surrounded by readily identifiable organisms and objects such as “dogs, trees, houses and cars”. Yet when it comes to categorizing these entities, we normally have a choice between categories of different levels of generality. Now just consider “dog” and “courser” in English example “to dog his footsteps” and “*to

courser one's footprint" in a bit detail. Thus, we can think of the creature comfortably stretched out as a 'dog', a 'courser', a 'Scotch courser' or more theoretically, as a 'mammal' or an 'animal'. Obviously all these cognitive categories are connected with each other in a kind of hierarchical relationship. Dogs are regarded as super-ordinate to coursers, and coursers as super-ordinate to Scotch coursers and bull coursers; looking in the other direction, dogs are seen as subordinate to mammals, and mammals as subordinate to animals. In this way, basic level categories achieve an ideal balance between internal similarity and external distinctiveness can now be rephrased in terms of attributes: the basic level is the one on which the largest bundles of naturally correlated attributes are available for categorization. Therefore, parent nouns on basic level categories have possessed the possibilities to be converted into denominal verbs.

In the above examples, the ones in the left column are properly expressed and those in the right are not. In examples from a-h in (163) and examples from a-d in (164), the problem of them lies that the underlined words in the right column are super-ordinate words or subordinate words corresponding to the underlined words in the left column. It shows that the super-ordinate words and the subordinate words converted into denominal verbs are unaccepted. The underlined words on the left column belong to the basic-level category. These words in this category are easier to memorize and are used in the highest frequency. Basic level categories are more concrete and relatively limited, which also have a level of abstraction that presents the maximum information with the least cognitive effort. Therefore, nouns in basic level categories are easier to be converted into denominal verbs. It is common in English and Mandarin denominal verbs.

Whereas, through the data collection and previous studies, the prototype effect is found in denominal verbs.

For example, the result of a web search performed by “Google” using the key word blanket + with reveals other possible situations for shelves: “quilt, snow, paper, dust and grass”, etc. All these things, share a common physical property, that is, they are all thin layers capable of covering. From this perspective, all these things constitute a category. But on the other hand, one can blanket a hill with grass, but he can hardly do so with water or stones, because the thing must be, if not exactly a blanket, a blanket-like thing. That is to say, things indicated by the adverbial increment of denominal verbs have to involve the canonical use of the thing indicated by the parent noun of the verb.



From the above examples, denominal verbs develop from some category of prototype. If a noun is conceived of as very close to the prototype for the category, which is nearer to the basic-level category, it is more representative of a concept and much easier to understand by average language users. In this way, nouns have the basis to be converted to verbs. In short, parent nouns of denominal verbs belong to the basic

level categories or have a prototype, which meet the demand of them to be converted. If a noun is more comprehensive and less representative, it cannot be converted into a verb.

4.7.2 Profiling and English and Mandarin Denominal Verbs

Langacker (2004) believes there are three types of profile: thing, relation, and process. A thing does not refer literally to a physical object, but it is defined in a more abstract manner and refers to cognitive events. A noun profiles a thing which is a region in a domain or domains, conceived as static and holistic. A relation is a permanent profile of the interconnections between participating entities. A process is a temporal profile which designates a sequence of states through the domain of conceived time; each state contains a relation between the participants in the domain. A verb profiles a process.

Therefore, when we analyze the meaning of a noun or verb, we should connect the thing designated with a noun or the process designated by a verb with the whole domain. This provides a theoretical basis for us to inspect denominal verbs. Now, we consider the operating mechanism of profile and base in English and Mandarin denominal verbs.

(165) a. They put the tiger in the cage.

b. They caged the tiger.

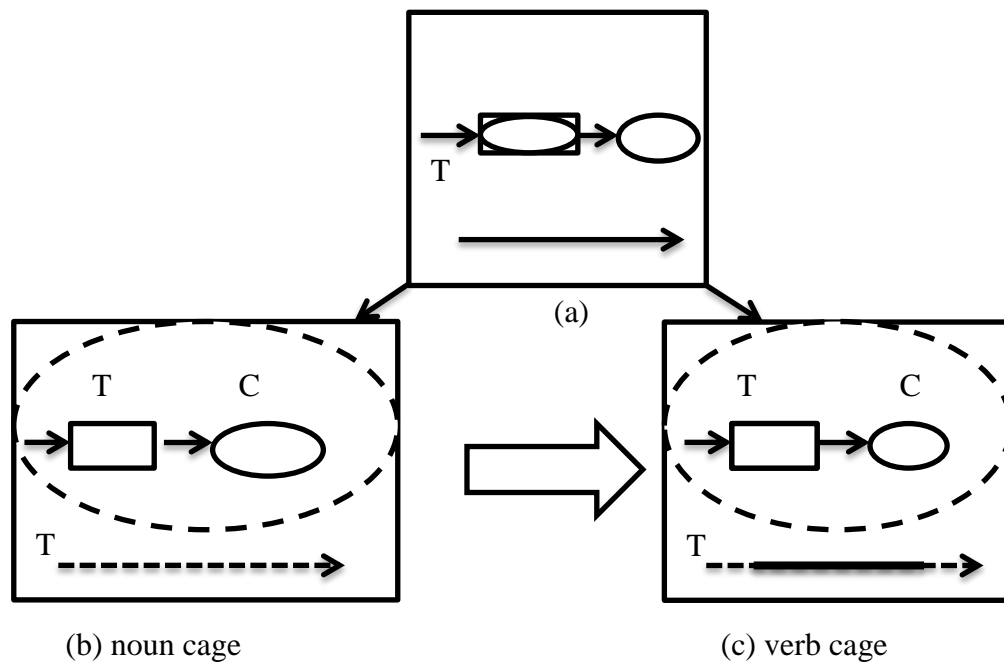


Figure 4.7.2 profiling in the process of noun cage to verb cage conversion

Sentence (165 a) describes an act to put something into someplace. And this domain includes the moved object (tiger), the location of the moved object (cage), the spatial relation between the moved object and the location (tiger transferred from the outside of the cage into it), and the perceived time. This domain, as diagrammed in Figure 4.7.2(a), is an abstract one, on the basis of which we operate a construal analysis on the relevant things and processes. As illustrated in Figure 4.7.2(b), the noun “cage” profiles the location as a thing, taking the whole relevant bounded space (represented by the dotted circle) in this domain as its base. As the location is profiled on this base, other elements like the moved object, the relation between the moved object and the location and the perceived time are back-grounded. While the verb “cage”, as showed in Figure 4.7.2(c) profiles the moved object, the location, the relation between the moved object and the location (diagrammed by the two arrows representing the moving direction of tiger), and the perceived time. From this diagram, we can see that the conversion (diagrammed by a double line arrow) from (b) to (c) involves the addition of profile. In

(c), the relation between tiger and cage is profiled (diagrammed by the two heavy line arrows); while in (b) such relation and the thing tiger are in latent status. The expanded profile in (c) proves that sentence (165 b) is semantically different from that of sentence (165 a). This kind of situation also fits with Mandarin denominal verbs, for example,

(166) a. 把 粮食 放 在 窖 里。

bǎ liáng-shí fàng zài jiào lǐ

function word grain put in cellar inside

Put the grain into the cellar.

b. 把 粮食 窖 起来。

bǎ liáng-shí jiào qǐ-lái

function word grain cellar complement

To cellar the grain.

In sentence (166 a), the noun “窖 jiào cellar” profiles the location as a thing. While the verb “窖 jiào cellar” in (166 b) profiles the moved object, the location, the relation between the moved object and location, and the perceived time. By the same reason as in Figure 4.7.2, the different meaning between sentence (166 a) and (166 b) results in the expanded profile in the moved object, the relation between “粮食 liáng-shí grain” and “窖 jiào cellar”, the location, and the perceived time.

As shown in the above two examples, we can conclude that a noun and its corresponding denominal verb have basically the same conceptual content which is the base for both the thing profile and the process profile. And the different profiled parts on the same conceptual base lead to the different meaning between a noun and its corresponding denominal verb. Therefore, the process of producing denominal verbs

involves the addition of profile.

4.7.3 English and Mandarin Denominal Verbs and the Change of Way of Scanning

The process of producing denominal verbs is usually analyzed as a categorical change of a lexical item from the status of a noun to that of a verb. Therefore, the change of way of scanning may be reflected clearly by denominal verbs both in English and Mandarin. For example:

(167) a. He put the newspaper on the porch.

b. He porched the newspaper.

In the above examples, the noun “porch” is converted to the transitive verb “to porch” which implies a frame including an agent, a patient, a location and possibly an instrument and a result. This linguistic configuration can in fact be seen as a reflection of a conceptual configuration, in which an agent as the energy source transmits an object to a location. This is obviously the case in sentence (167 a) where the noun “porch” denotes the location where the object finally rests. Since the location is the most prominent element in the whole action schema, it is profiled in the whole event and comes to stand for the event. Therefore, “on the porch” which represents people’s summary scanning, turns to represent the sequential scanning after being converted into porch. Other examples of change of way of scanning in Mandarin denominal verbs are as follows:

(168) a. 你 为什么 不 给 我 打 电话?

nǐ wèi-shén-me bù gěi wǒ dǎ diàn-huà

you why NEG give me dial telephone

Why don’t you call me?

b. 你 为什么 不 电话 我?

nǐ wǎ-shén-me bù *diàn-huà* wǒ

you why NEG *telephone* me

Why don't you telephone me?

The noun “电话 *diàn-huà* telephone” is converted to verb in sentence (168 b) which implies a frame containing an agent, a patient, and an instrument. Since the instrument is the most prominent element in the whole event, it comes to stand for the event. Therefore, the noun “电话 *diàn-huà* telephone” which represents people's summary scanning, turns to represent the sequential scanning after being converted to verb “电话 *diàn-huà* telephone”. Thus the whole action as a process is presented to the hearer.

In short, the use of a denominal verb changes people's way of scanning of an event from summary scanning into sequential scanning. With such changes in ways of scanning, the process of an action is highlighted.

4.8 Summary

This chapter mainly tries to answer the research questions raised in chapter one, and find out the linguistic theoretic basis for the formation of N-V conversion in English and Mandarin.

We have discussed metonymies in English and Mandarin denominal verbs mainly in light of metonymy theory. As pinpointed, metonymy is the establishment of psychological connection between two concepts, which co-exist within a given metonymy mode. From the above analysis, it is clear that metonymies in English and Mandarin denominal verbs are universal and even they have some common metonymic

processes. Through analyzing, we can conclude that with differences existing in the mechanisms of producing and understanding metonymies in English and Mandarin denominal verbs have similar cognitive metonymic mechanisms. In this aspect, English and Mandarin, to some extent, not only have common encyclopedic knowledge of a specific domain but also the cultural patterns shared in a particular part or to a certain degree. For this reason, it is proved that there are the possibilities for nouns shifting to verbs in human languages.

Metaphor, as a tool for organization of human experience, is pervasive in our daily life. It helps people to acquire and understand concepts more easily and directly. During the process of N-V conversion, denominal verbs are endowed metaphorical properties, that is to say, the process of N-V conversion is the process which the parent nouns lose their referential meanings and acquire the descriptive meaning. The process of N-V conversion is actually a metaphorical process. We dealt with metaphors in English and Mandarin denominal verbs through classifying them on the basis of data collection. Metaphorical mapping, the working mechanism of metaphor is adopted to carry out a comparative analysis of metaphors in English and Mandarin denominal verbs.

Guided with basic-level categories, it shows that denominal verbs are mostly formed by the words often occurred on basic level categories. Moreover, parent nouns are converted with the prototypical effort, which are representatives in their categories. Also, it reveals that the conversion from noun to verb indicates alternate linguistic construal operations on the same base. The process of producing denominal verbs involves two interwoven cognitive operations: the addition of profiles and the switch from summary scanning to sequential scanning on the same conceptual base.

So far, from what we have analyzed above, it indicates that not only metaphorical and metonymic mechanisms work in the development of denominal verbs. Besides that, basic-level categories, profiling, summary scanning and sequential scanning also play essential majors in expounding English and Mandarin denominal verbs.

In a nutshell, cognitive linguistics can interpret the underlying mechanisms of producing and understanding English and Mandarin denominal verbs comprehensively.

CHAPTER FIVE

CONCLUSION

5.1 Introduction

After careful analysis and consideration of the above, we have finally reached some conclusions. This chapter will be devoted to three tasks: first, the major findings of the study will be summarized; second, the implications will be discussed; third, the limitations of the present study are to be pointed out, which might inspire later research.

5.2 Significant Findings of the Study

Through the study of the preceding chapters, we can conclude that not merely metonymy and metaphor, the main two cognitive models operate, but also other cognitive processes work in English and Mandarin denominal verbs. We draw the conclusion as sequentially related to metonymy, metaphor, basic-level category, profiling and summary/sequential scanning, main research results of this dissertation are presented in the following way:

5.2.1 Major Findings of Metonymy in English and Mandarin Denominal Verbs

Primarily, similar metonymic mechanisms exist in English and Mandarin denominal verbs. On the basis of data collection and textual analysis, we have sub-divided them into locatum verbs, location verbs, duration verbs, agent verbs, goal verbs, object verbs, source verbs, instrument verbs and miscellaneous verbs. By comparing the major six types of metonymic denominal verbs in English and Mandarin, namely, instrument verbs, locatum verbs, location verbs, goal verbs, agent verbs, and object verbs, we have found that similar metonymic mechanisms exist in both English and Mandarin. The common metonymic mechanism of denominal verbs is to activate

the concept of relation by referring to a concept of entity, people employ, in one cognitive domain, the salient, well-understood and easy to perceive part to stand for the whole or to choose the whole to stand for one of its parts .

Although some types of their corresponding nouns are similar in English and Mandarin, their distributions of denominal verbs are various for the types of nouns converted to verbs are different in English and Mandarin. The comparison shows that instrument verbs take up the largest percentage in both English and Mandarin, which can be explained in a cognitive way as well: instrument nouns usually involve a cognitive domain of action and the functional nature of instruments make them more vulnerable to denominalization. Moreover, since Chinese people incline to pay more attention to the result in an Action-Result schema, goal verbs and object verbs take a relatively larger percentage in Mandarin. Through expounding the samples, the cognitive process and the producing mechanism of English and Mandarin denominal verbs are found in the similar metonymic modes. It verifies that people conceptualizes the world within a certain intercommunity, which makes people understand one another easier. However, difference is still in existence. DURATION VERBS/TIME FOR ACT is unique for English denominal verbs. In the Mandarin, nouns stood for time cannot be converted into denominal verbs, which has a tendency to be converted into adjectives.

5.2.2 Major Findings of Metaphor in English and Mandarin Denominal Verbs

Expatiations of metaphors in English and Mandarin denominal verbs are made in the framework of metaphor theory. The results can be made:

For metaphoric denominal verbs, we have sub-classified them into five groups according to the referents of their parent nouns: persons, animals, human body parts,

objects and places. The comparison also indicates that similar metaphoric mechanisms are shared by English and Mandarin. That is, the parent noun X originally denoted a particular structure in a source domain. When X is converted to a verb Y and used metaphorically to talk about a target domain, it maps the particular structure of the former onto the latter. That is, Y has the metaphorical meaning which is a denominal verb.

The types of nouns converted to verbs are different in English and Mandarin, for this reason, their distributions of denominal verbs are various. From the results of data collection, it displays that most kinds of English nouns converted into denominal verbs are marked with metaphorical meanings but Mandarin ones are less. English denominal verbs mainly concentrate on animals, instrument, human bodyparts, and costume; Mandarin denominal verbs are mostly limited to instruments and animals.

Then with the usage of conceptual metaphor and different cultures, the features of nouns are endowed various cultural meanings, therefore, the choices of mapping are various in English and Mandarin denominal verbs. In light of analysis, we can understand that although English and Mandarin denominal verbs belong to different culture backgrounds, some of them can map onto the same target domain with the same metaphorical features. For this reason, to some extent human cognition is similar even to other cultural, religious effects. In this way, people with different languages can understand one another easily. Moreover, some English and Mandarin denominal verbs of the same kinds have been mapped onto the similar features of their parent nouns, which indicates that metaphorical thinking is a part of the cognitive processes through which the human mind conceptualizes the world. Truly, the differences between English

and Mandarin denominal verbs cannot surely be avoided. In this case, cultural difference, or other factor, exerts many influences on mapping the features.

5.2.3 Major Findings of Other Conceptual Representations in English and Mandarin Denominal Verbs

After discussion of metaphor and metonymy in English and Mandarin denominal verbs, a further reconsideration of denominal verbs in both languages are made. It is found that basic-level category, profiling and summary/sequential scanning these cognitive models operated in denominal verbs in the meantime.

First of all, in both English and Mandarin, most denominal verbs attribute to words in the basic-level category. The superordinate words and the subordinate words converted into denominal verbs are unaccepted. The nouns converted into denominal verbs are easier to memorize and are used to a higher frequency, and in most cases belong to the basic level categories. Besides, based on data collection and analysis, it is clear that the parent nouns converted to denominal verbs are close to their prototype.

Afterwards, we have discussed the English and Mandarin denominal verb in the view of prominence based on linguistic construal operations like profiling, summary scanning and sequential scanning. From the analysis, we can conclude that the conversion from noun to verb indicates alternate linguistic construal operations on the same base. The process of producing denominal verbs involves two interwoven cognitive operations: the addition of profiles and the switch from summary scanning to sequential scanning on the same conceptual base.

On the whole, the cognitive approach to meaning accommodates conceptualizers' initiative in language use. Conceptualizers are able to construe the objective world in

different ways in language production and understanding. Therefore, the cognitive approach provides a unified account for innovative use of denominal verbs. Also, the comparative research has indicated that denominalization is more productive in English than in Mandarin, as the amount and resources of English denominal verbs far surpass those of Mandarin ones and denominalization in Mandarin is more context-dependent and less free as compared to that of English.

5.3 Implications of the Study

This dissertation can be applied to other fields connected to it. It is of great significance in our daily life.

Firstly, it reflects a lot on the translation work. It reminds us of the differences in language use. Some words can be equally used while others can't be. It needs to take into the consideration of cultural background as well as perceptions. Denominal verbs have the rhetorical effect of economy, vividness and efficiency, which can be fully performed in the real translation work.

Secondly, it reflects the significance of cultural background. Due to the differences in many aspects of the culture, words have different symbolic meanings in their uses. For instance, the word "dog" in English is a somehow commendatory word while in Chinese culture it is often used together with unfavorable inferences. Such kinds of cultural differences have their reflections on the distribution and cognitive mechanisms of denominal verbs in English and Mandarin.

Thirdly, it reflects on the acquisition of lexical words. Denominal verb is widely used in English and Mandarin daily expressions. A good mastery of denominal verb is very important but it is not an easy job to do. Sometimes when we learn a word, we are

learning its whole system like its connotations, uses as well as concepts. Due to the features of denominal verbs, in the lexical acquisition of them we can employ some strategies based on the mechanisms, especially for the foreign language learners.

In a word, its applications and significance can't be neglected.

5.4 Limitations of this Dissertation

This dissertation is aimed to make a cognitive and comparative study on English and Mandarin denominal verbs, but it is inevitable that the current study has been constrained by its own perspective, methodology and the scope of research. Thus it will naturally be marked with some demerits, and it is necessary to make an elaboration of them in the hope that the aspects concerned can be improved in the future studies.

My research is restricted to theories of cognitive linguistics. As denominal verbs is a as a full-fledged subject, it is meaningful to apply some other theories like systemic-functional grammar, and the syntactic-semantic approach to this linguistic phenomenon.

And the data of the research is still not complete. Though I have searched from many different sources, the statistics are not perfect. The current study has been involved with many English and Mandarin denominal verbs, but the fact is that the current research falls short of more newly appearing denominal words, they can't be covered here as the language is always changing. I have collected many English and Mandarin data, but most of them are modern English and Mandarin. If I can collect more data on ancient English and Chinese, the cognitive and comparative study on this phenomenon will be more comprehensive.

Next, because of constant changes and developments of languages, it is not easy to

tell apart which is newly created denominal verb or which is conventional denominal verb. And my comparison of English and Mandarin denominal verbs is confined to text analysis, so that some other important elements, such as psychological factors, might have been neglected.

5.5 Future Perspective

I intend to conclude my discussions by pointing out the future directions.

The first suggestion is that future study might focus on only one category of denominal verbs and make a more meticulous and in-depth comparison of English and Mandarin denominal verbs. In my study, I have compared all the main categories of denominal verbs in English and Mandarin, and due to limited space, some comparative work might have lacked depth. However, during the research process I have noticed that there are several categories which are worthy of further comparison, such as instrument words, animal words and human-body-part words.

The second avenue for future research might include an extension of the comparative work by investigating the use of denominal verbs in English and Mandarin. Cross linguistic observation indicates that different languages impose different degrees of constraint on the noun-to-verb conversion. It is extremely valuable to study this phenomenon in various languages and try to find out the constraint.

In the end, I cherish the hope that more attention will be paid to this topic and more achievements will be obtained. Language is developing continuously; it is not static. It needs to develop with social progress. Further effort in this field is inevitably desirable to achieve a complete vision of this phenomenon in question.

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APPENDICES

Appendix 1: Data of English Metonymic Denominal Verbs

Data of English Metonymic Denominal Verbs (collected from Clark's study)

No.	Type	Amount	Percentage (%)	Examples
1	Locatum Verbs	340	25.5%	sheet, paper, paint, wax, roof, brick, butter, jam, perfume, oil, water, skin, feather, shell, <u>blanket</u> the bed, <u>paint</u> the ceiling, <u>perfume</u> her neck, <u>diaper</u> the baby, <u>saddle</u> the horse, <u>muzzle</u> the dog, <u>asterisk</u> the sentence, <u>spice</u> the food, <u>pepper</u> the food, <u>sugar</u> the tea, <u>oil-paint</u> the house, <u>beewax</u> the table, <u>tar-and-feather</u> the prisoner, <u>cobblestone</u> the road, <u>wool-carpet</u> the floor
2	Location Verbs	190	14.2	bank, land, clothes-rack, door-mat, shelve, spool, blacklist, inventory, frontpage, <u>round</u> the planes, <u>land</u> the planes, <u>shelve</u> the books, <u>tring</u> the beads, <u>leash</u> the dog, <u>blueprint</u> the plans, <u>headquarter</u> the troops, <u>shelter</u> the fugitives, <u>kennel</u> the dog, <u>cage</u> the tigers, <u>cellar</u> the wine, <u>corral</u> the horses, <u>bag</u> the potatoes, <u>porch</u> the newspaper, <u>coin-purse</u> the pennies, <u>clothes-rack</u> the hat
3	Duration Verbs	13	1.0%	summer, vacation, weekend, Christmas, <u>summer</u> in France, <u>winter</u> in California, <u>vacation</u> in Mexico, <u>holiday</u> in France, <u>weekend</u> at the cabin, <u>honeymoon</u> in Hawaii, <u>Christmas</u> in England, <u>New Year</u> in Omaha, <u>Thanks-giving</u> with his parents, <u>moonlight</u> as a watchman, <u>daylight</u> as a barber, <u>jet-lag</u> , <u>overnight</u> at the White House
4	Agent Verbs	163	12.2%	butcher, referee, tutor, mother, baby, <u>butcher</u> the cow, <u>jockey</u> the horse, <u>nurse</u> the patient, <u>doctor</u> the

				victim, <u>agent</u> a book, <u>mother</u> the child, <u>parent</u> the children, <u>fox</u> the people, <u>parrot</u> every word, <u>dog</u> the escapee, <u>ape</u> the policeman, <u>nursemaid</u> the baby, <u>spanieled</u> me at heels
5	Goal Verbs (Including Experiencer Verbs)	170	12.7%	fool, orphan, loop, braid, <u>fool</u> the man, <u>orphan</u> the children, <u>knight</u> Gawain, <u>widow</u> the woman, <u>martyr</u> the woman, <u>hostage</u> the child, <u>pile</u> the money, <u>loop</u> the rope, <u>knot</u> the string, <u>powder</u> the aspirin, <u>crumb</u> the bread, <u>sandwich</u> the man between them
6	Source Verbs	3	0.2%	piece, word, letter, <u>piece</u> the quilt together, <u>word</u> the sentence, <u>letter</u> the sign
7	Instrument Verbs	410	30.7%	buick, pin, nail, mop, sports-car, tractor, taxi, 747, screw, cement, shackle, chain, lock, hook, <u>mop</u> the floor, <u>broom</u> the floor, <u>hammer</u> the nail into the board, <u>shoe-heel</u> the nail into the frame, <u>knife</u> the man, <u>bomb</u> the village, <u>TNT</u> the building, <u>fire-bomb</u> the car, <u>M-1</u> the sniper, <u>net</u> the fish, <u>blockade</u> the road, <u>rope</u> off the area, <u>fork</u> the pickle, <u>launderette</u> the clothes, <u>school</u> the children, <u>head</u> the ball, <u>thumb</u> the pages, <u>knuckle</u> someone's face, <u>red-pencil</u> the error, <u>brake</u> the car, <u>Xerox</u> the article, <u>iron</u> the clothes, <u>school-bell</u> the class to order, <u>smoke</u> the fish, <u>floor-sweeper</u> the carpet, <u>ax</u> the tree down, <u>tomahawk</u> the settlers, <u>carbon monoxide</u> oneself to death
8	Object Verbs	31	2.3%	lunch, blackberry
9	Miscellaneous Verbs	15	1.1%	rim, wing, kneecap, rear-end, rain, snow
	Total	1335		

Appendix 2: Data of Mandarin Metonymic Denominal Verbs

Data of Mandarin Metonymic Denominal Verbs

No.	Type	Amount	Percentage (%)	Examples
1	Locatum Verbs	27	15.4%	粉 fěn powder, 奶 nǎi milk, 设备 shèbèi equipment, 津贴 jīn-tiē allowance
2	Location Verbs	25	14.3%	袖 xiù sleeve, 兜 dōu pocket, 盆 pán basin, 土 tǔ soil
3	Duration Verbs	---	---	
4	Agent Verbs	18	10.3%	顾问 gù-wèn consultant, 流氓 liú-máng rascal, 领袖 líng-xiū leader, 主 zhǔ host
5	Goal Verbs	30	17.1%	碱化 jiǎn-huà basification 谱 pǔ compose 牢骚 láo-sāo complaint, 锈 xiù rust 圈 quān circle
6	Object Verbs	20	11.4%	狗肉 gǒu-ròu dog-meat, 便饭 biàn-fàn potluck, 谬论 miù-lùn fallacy, 手术 shǒu-shù surgery, 鞋 xié shoe
7	Source Verbs	2	1.1%	磁 cí magnetic, 锡 xī tin
8	Instrumental Verbs	50	28.6%	杠杆 gàng-gǎn lever, 的士 dīshì (taxi), 鞭 biān whip
9	Miscellaneous	3	1.7%	该雨是雨 gāi yǔ shì yǔ It supposed to <u>rain</u> and <u>rain</u> , 被全勤 bèi quán qín being <u>full attendance</u>
	Total	175		

Appendix 3: Data of English Metaphoric Denominal Verbs

Data of English Metaphoric Denominal Verbs (collected from the internet search engine *Google*)

No.	Type	Amount	Percentage (%)	Examples
1	Persons	16	25%	Houdini, Nixon, Clinton, Lewinsky, Napoleon, Shylock, Uncle Tom, father, mother, slave, nurse, Sadalam Husseined, Hamlet, Sheldon, Hilter, Shakespeare
2	Animals	15	23.4%	fox, rat, fish, crab, monkey, duck, snake, pig, wolf, crane, parrot, ape, buffalo, horse, cock
3	Human Body Parts	10	15.6%	stomach, nose, elbow, head, hand, neck, shoulder, elbow, face, back
4	Objects	20	31.2%	screw, dish, rag, bench, square, rasp, file, butter, cream, pepper, sandwich, mushroom, spruce, tree, collar, skirt, spring, storm, snow, cloud
5	Places	3	4.7%	floor, coast, shanghai
	Total	64		

Appendix 4: Data of Mandarin Metaphoric Denominal Verbs

Data of Mandarin Metaphoric Denominal Verbs

No.	Type	Amount	Percentage	Examples
1	Persons	16	28.6%	王熙凤 Wáng Xīfèng, 柏拉图 bó lā tú Plato, 林黛玉 Lin Daiyu, 阿 Q Ah Q, 孙悟空 Sun Wukong, 姚明 Yao Ming, 雷锋 lei Feng, 李小龙 Li Xiaolong, 小沈阳 Xiao Shengyang, 孙子 sūn-zi grandson, 小资 xiǎo-zī, petty bourgeoisie, 绅士 shēn-sh ǵentle man, 淑女 shū-nǚ lady, 匪 fěi robber, 知己 zhī-jībosom friend, 红颜 hóng-yán beautiful woman
2	Animals	12	21.4%	熊 xióng bear, 牛 niúcow, 猫 māo cat, 猴 hóu monkey, 龟 guī tortoise, 马 mǎ horse, 虎 hǔ tiger, 狗 gǒu dog, 狼 láng wolf, 鹦鹉 yīng-wu parrot, 猪 zhū pig
3	Human Body Parts	3	5.4%	背 bǎi back, 头 tóu head, 肩 jiān shoulder
4	Objects	20	35.7%	坑 kēng pit, 盖 gǎi lid, 铁 tiě iron, 火 huǒ fire, 梳 shū comb, 兜 dōu pocket, 坑 kēng hole, 钉 dīng nail, 盖 gǎi lid, 刨 páo blade, 网 wǎng net, 弓 gōng bow, 棒 bàng stick, 铁 tiě iron, 水 shuǐ water, 柴 chá firewood, 糠 kāng bran, 泥 ní mud, 瓷器 cíqì porcelain, 鱼肉 yú rǒu fish meat, 醋 cù vinegar, 菜 cài dish, 骨朵 gǔ-duǒ bloom
5	Places	5	8.9%	花前月下 huā qián yuè xià under the moon and flowers, 中国 zhōng guó China, 港 gǎng harbor, 城市 chéng-shì city, 农村 nóng-cūn village
	Total	56		

Appendix 5: Lexicalized Mandarin Metonymic Denominal Verbs Collected from Contemporary Chinese Dictionary

1. Object Denominal Verbs

NOUN			VERB		
SourceN	Pinyin	Meaning	TargetV	Pinyin	Meaning
畚	běn	scoop	畚	běn	to scoop
衬	chèn	a lining	衬	chèn	to line
叠	dié	a stack/pile of something	叠	dié	to stack/pile
糊	hú	paste	糊	hú	to paste
划	huà	a stroke	划	huà	to form a stroke
卷	juǎn	a roll of something	卷	juǎn	to roll up
缝	fèng	a seam	缝	fèng	to sew
跨	kuà	groin	跨	kuà	to stride, bestride
尿	niào	urine	尿	niào	to urinate
挑	tiāo	loads carried on a should pole	挑	tiāo	To carry on the shoulder with a pole
扎	zā	a bundle of something	扎	zā	to bind into a bundle
折	zhé	a fold	折	zhé	to fold
冠	guān	a cap	冠	guān	to put on a cap
种	zhǒng	a seed	种	zhǒng	to plant, grow
担	dān	a carrying people and loads on it	担	dān	to carry on a shoulder pole
磨	mó	a millstone	磨	mó	to grind
驮	tuó	a load carried by a pack animal	驮	tuó	to carry on the back of animal
钻	zuān	a drill	钻	zuān	to drill
爪	zhuǎ	law	抓	zhuā	to catch or grab with claws
褶	zhě	a pleat	折	zhé	to pleat, fold

2. Location Denominal Verbs

NOUN			VERB		
SourceN	Pinyin	Meaning	TargetV	Pinyin	Meaning
点	diǎn	a dot	点	diǎn	to dot, put a dot on
滨	bīn	bank, shore	滨	bīn	to border on (sea)

毒	dú	poison	毒	dú	to poison
盖	gāi	a lid	盖	gāi	to cover with a lid
奶	nǎi	breast	奶	nǎi	to breast-feed
网	wǎng	a net	网	wǎng	to net
钉	dīng	a nail	钉	dīng	to nail
钢	gāng	steel	钢	gāng	to reinforce with steel
泥	ní	mud	泥	ní	to cover with mud/plaster
粪	fèn	manure	粪	fèn	to put manure
漆	qī	paint	漆	qī	to paint
膏	gāo	grease, ointment	膏	gāo	to grease, lubricate
瓦	wǎ	tile	瓦	wǎ	to tile
油	yóu	oil	油	yóu	to paint with oil paint
盐	yán	salt	腌	yān	to pickle with salt

3. Goal/Resultative Denominal Verbs

NOUN			VERB		
SourceN	Pinyin	Meaning	TargetV	Pinyin	Meaning
包	bāo	a pack, package	包	bāo	to pack/wrap up
擦	cā	a brush, eraser	擦	cā	to erase, scrub
侧	cè	side	侧	cè	to lean to one side
锉	cuò	a file	锉(剉)	cuò	to file
串	chuàn	a string of something	串	chuàn	to string together
粉	fěn	powder	粉	fěn	to white-powder
哽	gěng	fishbone	哽	gěng	to choke with on fishbone
画	huà	a drawing, painting	画	huà	to draw, paint
架	jià	a shelf, frame, prop	架	jià	to prop,shelve
胶	jiāo	glue	胶	jiāo	to glue
面	miàn	face	面	miàn	to face
片	piàn	a slice of something	片	piàn	to slice
闩	shuān	a bar(for door,gate)	闩	shuān	to bar/bolt door
楦	xuān	shoe last	楦	xuān	to last shoes
闸	zhā	floodgate	闸	zhā	to dam up

					water
罩	zhào	a cover, shade	罩	zhào	to cover, shade
座	zuò	a seat	座	zuò	to sit
旁	páng	side	傍	bàng	to be by the side of
中	zhōng	center	中	zhòng	to hit the target

4. Agent Denominal Verbs (Act or be like BASE NOUN)

NOUN			VERB		
SourceN	Pinyin	Meaning	TargetV	Pinyin	Meaning
磅	bàng	a scale	磅	bàng	to weigh
包	bāo	a pack, package	包	bāo	to pack/wrap up
堆	duī	a pile of something	堆	duī	to pile up
垛	duò	a stack of something	垛	duò	to stack
捆	kǔn	a bundle of something	捆	kǔn	to bundle
攘	rǎng	a dagger	攘	rǎng	to stab
筛	shāi	a sieve, sifter	筛	shāi	to sieve, sift
拍	pāi	a bat, racket	拍	pāi	to bounce(ball)
束	shù	a bundle of something	束	shù	to bundle
刷	shuā	a brush	刷	shuā	to brush
指	zhǐ	finger	指	zhǐ	to point with finger
皱	zhòu	wrinkle	皱	zhòu	to wrinkle
间	jiān	space between	间	jiàn	to create space between
把	bǎ	a handle	把	bǎ	to hold
称(秤)	chēng	a scale	称	chēng	to weigh
撑	chēng	a prop	撑	chēng	to prop
扫	sǎo	a broom, duster	扫	sǎo	to weep, to dust
扇	shàn	a fan	扇	shān	to fan

5. Locatum Denominal Verbs

NOUN			VERB		
SourceN	Pinyin	Meaning	TargetV	Pinyin	Meaning
鞍	ǎn	a saddle	鞍	ǎn	to saddle and bridle
背	bèi	back	背	bēi	to carry on back

圈	ju àn	a pen, sty	圈	juān	to shut in a pen
顶	dǐng	top of the head	顶	dǐng	to carry on the head
窖	ji ào	cellar	窖	ji ào	to store in a cellar
仓	cāng	storage	藏	c áng	to put into storage
炕	k àng	a heatable brick bed	炕	k àng	to bake or dry on a kang
套	t ào	a case, cover	套	t ào	to put into a case
冰	bīng	ice	冰	bīng	to put on ice, freeze
袖	xi ù	sleeve	袖	xi ù	to tuck hands into sleeves

6. Miscellaneous Denominal Verbs (Remove/take BASE NOUN)

NOUN			VERB		
SourceN	Pinyin	Meaning	TargetV	Pinyin	Meaning
滴	dī	a drip, a droop of something	滴	dī	to drip

7. Instrumental Denominal Verbs (Use BASE NOUN)

NOUN			VERB		
SourceN	Pinyin	Meaning	TargetV	Pinyin	Meaning
刨	b ào	a plan	刨	b ào	to plane(wood)
鞭	biān	a whip	鞭	Biān	to whip
锄	ch ú	a hoe	锄	ch ú	to hoe
犁	l í	a plow	犁	l í	to plow
梳	shū	a comb	梳	shū	to comb
铤	bēn	an adze	铤	bēn	to adze
叉	chā	a fork	叉	chā	to fork
铲	chǎn	a shovel	铲	chǎn	to shovel
锤	ch ú	a hammer	锤(捶)	ch ú	to hammer
垫	di àn	a cushion	垫	di àn	to cushion
钩	gōu	a hook	钩	gōu	to hook
夹	jiā	a clip	夹	jiā	to clip
锯	jù	a saw	锯	jù	to saw
铐	k ào	handcuffs	铐	k ào	to handcuff
扣	k òu	a button	扣	k òu	to button
砻	l óng	a rice huller	砻	long	to hull rice
碾	niǎn	a roller (for	碾	niǎn	to grind or husk

		grinding grains)			with a roller
镊	ni è	tweezers	镊	ni è	to pick up something with tweezers
耙	p á	a rake, harrow	耙	p á	to rake, harrow
钳	qi án	pliers	钳	qi án	to grip with pliers
锁	suǒ	a lock	锁	suǒ	to lock
印	y ò	a seal	印	y ò	to stamp with a seal
凿	z áo	a chisel	凿	z áo	to chisel
铡	zh á	hay cutter	铡	zh á	to cut with hay cutter
锥	zhuī	an awl	锥	zhuī	to pierce