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**THE CONTEMPORARY THEORY OF METAPHOR:
A PERSPECTIVE FROM CHINESE**

by
Ning Yu

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A Dissertation Submitted to the Faculty of the
**GRADUATE INTERDISCIPLINARY PROGRAM
IN SECOND LANGUAGE ACQUISITION AND TEACHING**
In Partial Fulfillment of the Requirements
For the Degree of
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In the Graduate College
THE UNIVERSITY OF ARIZONA

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To
My beloved wife, Jie Huang
and
My beloved son, Ting Yu

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ABSTRACT

The primary objective of this dissertation is to contribute to the contemporary theory of metaphor from the viewpoint of Chinese, so as to help place the theory into a wider cross-linguistic and cross-cultural perspective. Aiming at this primary objective, it explores two major questions faced by the contemporary theory: (1) if abstract reasoning is at least partially metaphorical in nature; and (2) what conceptual metaphors are universal, widespread, or culture-specific. It focuses on two conceptual metaphors--the TIME-AS-SPACE metaphor and the Event Structure Metaphor--which have been proposed as candidates for metaphorical universals.

The study shows how time in Chinese is conceptualized in terms of space and motion, fit into the two-case model proposed by Lakoff for English. In case 1, time is conceptualized as moving objects toward and past a stationary Observer; in case 2, time is conceptualized as bounded locations through which the Observer travels. It also suggests that a third case, in which the Observer travels along with a time-object through time-locations, is necessary for both Chinese and English. It is shown that Chinese and English not only follow the same principle of spatialization of time, but also share the same directionality parameter: the future is ahead of, and the past is behind, the Observer.

This study also shows that in Chinese various aspects of event structure such as states, changes, causes, actions, purposes, means, and difficulties are conceptualized metaphorically in terms of space, motion, and force, just as in English. The conceptual mappings at a high

hierarchical level of the metaphor system are found the same in both English and Chinese, whereas the specific linguistic instantiations of those conceptual mappings may be similar or different between the two languages.

This study reinforces the view that metaphor is the main mechanism through which we comprehend abstract concepts and perform abstract reasoning. It also supports the candidacy of the TIME-AS-SPACE metaphor and the Event Structure Metaphor for metaphorical universals. These two conceptual metaphors are grounded in some basic human experiences that may be universal to all human beings.

CHAPTER 1

INTRODUCTION

The importance of metaphor to human language and cognition cannot be over emphasized. This importance is well summarized by Malotki (1983: 13) when he writes:

Man, in confronting reality, faces a kaleidoscope of phenomena ranging from the natural to the man-made, to the imaginary, to the totally abstract. Comprehension of such a broad inventory of reality and non-reality requires language, the tool that permits man to take verbal stock of objective and subjective experiences alike. In man's ongoing endeavor to conceptualize and verbalize a world that can never be fully known, language is the vital intermediary. Language provides a repertoire of coping mechanisms, of which metaphor is one of the most powerful and useful.

Important as it is, metaphor has attracted the attention of scholars interested in language for more than 2000 years.

Traditionally, however, metaphor was viewed as a matter of *language*, as a set of extraordinary or figurative linguistic expressions whose meaning is reducible to some set of literal propositions. This view can be traced back to as early as Aristotle, who defined metaphor in terms of deviation from ordinary usage: 'Metaphor consists in giving the thing a name that belongs to something else' (from Ricoeur 1975: 13). According to this view, metaphor is primarily decorative and ornamental in nature. It is not necessary; it is just nice. Viewed as such, metaphor was called a figure of *speech*, and its study was confined mostly to literature and rhetoric (Lakoff 1986a).¹

In the past few decades, however, the situation has undergone a radical change. The interest in metaphor and the study of its structure, mechanism, function, effect, and cognitive nature have grown rapidly in a broad range of disciplines: linguistics, anthropology, philosophy, psychology, education, sciences, as well as literary criticism and rhetoric (see, for instance, Sapir & Crocker 1977, Sacks 1978, Honeck & Hoffman 1980, Johnson 1981a, W. Taylor 1984, Paprotté & Dirven 1985, Danesi 1988a, Fernandez 1991a, Ankersmit & Mooij 1993, Ortony 1993a, Goossens et al. 1995). As Wayne Booth, a famous literary theorist and rhetorician, noticed one and a half decades ago, 'No matter how we define it, metaphor seems to be taking over not only the world of humanists but the world of the social and natural sciences as well' (1978: 48). He regarded the transitional period as 'an intellectual movement' which is 'one of the "greatest" in the history of thought' (47). From the viewpoint of a philosopher, Mark Johnson (1981a: ix) observed the change like this: 'We are in the midst of a metaphormania. Only three decades ago the situation was just the opposite: poets created metaphors, everybody used them, and philosophers (linguists, psychologists, etc.) ignored them. Today we seem possessed by metaphor'. By then metaphor had already moved 'from the status of a subsidiary concern to the status of a central problem' (Johnson 1981b: 3).

Rising in this change is the view that metaphor is a matter of *thought* and, as such, should be called a figure of *thought* (Lakoff 1986a). This view is based on 'an ever-increasing awareness that figurative language lies at the core of communication and of cognition' (Danesi 1988b: vii). The

rise of the new view and the current multidisciplinary exploration mark a striking phenomenon in modern intellectual history: the transformation of metaphor from a specialized concern of rhetoricians and literary critics to a central concept in the study of human understanding. Metaphor is now a concept with multidisciplinary implications. Its use has been found 'in virtually every aspect of human thought: physical science, biological science, economics, law, political theory, psychology, art, philosophy, business, morality, and even poetry' (Johnson 1995: 158). As Johnson (1993b, 1995) suggests, metaphor is definitional of human beings: 'whatever else we are, we humans are metaphorizing animals' (1995: 159).

Emerging from this period of transformation is a new theory of metaphor whose beginning was marked by the publication of Lakoff and Johnson's seminal book *Metaphors We Live By* in 1980.² The central thesis of the theory is that metaphor, in its broad sense, is pervasive and essential in language and thought. Human conceptual systems 'are pervasively and ineliminably structured by metaphor, metonymy, and other kinds of imaginative structure' (Johnson 1995: 158). During the past one and a half decades, the theory has been developed and articulated in works such as Brugman 1988, Gibbs 1993, 1994a, 1994b, Goossens et al. 1995, Johnson 1983, 1987, 1989a, 1989b, 1991, 1992, 1993b, 1993c, Lakoff 1986a, 1986b, 1987a, 1987b, 1987c, 1989b, 1990, 1992, 1993a, 1993b, 1994, Lakoff & Johnson 1981, Lakoff & Turner 1989, Sweetser 1990, 1992, Turner 1987, 1991, to mention just a few.

Following Lakoff (1993), I will call this theory of metaphor 'the contemporary theory of metaphor'. The primary objective of my study is

to contribute to the contemporary theory of metaphor from the viewpoint of Chinese, so as to help place the theory into a wider cross-cultural perspective.

Aiming at this primary objective, the study explores two major questions faced by the contemporary theory: (1) if abstract reasoning is at least partially metaphorical in nature; and (2) what conceptual metaphors are universal, widespread, or culture-specific. It focuses on two conceptual metaphors--the TIME-AS-SPACE metaphor and the Event Structure Metaphor (see Lakoff 1990, 1993a, 1994, etc.)--which have been proposed as candidates for metaphorical universals.

The contemporary theory of metaphor claims that abstract concepts are at least in part understood and expressed metaphorically in spatial terms and that abstract reason is achieved by using certain mechanisms for the perception of spatial relations. This is seen as the consequence of the Invariance Principle, which states that metaphor projects the image-schematic structure of the source domain onto the target domain in a way that is consistent with inherent target domain structure. In this theory, therefore, metaphor is the locus for abstract reason. It casts the abstract and the nonphysical into the concrete and the physical, usually with spatial dimensions. Indeed, most image schemas, such as SOURCE-PATH-GOAL, OBJECT, CONTAINMENT, BALANCE, LINKS, CYCLE, are spatial in nature. Even various invisible force schemas, such as COMPULSION, ATTRACTION, COUNTERFORCE, DIVERSION (Johnson 1987), bring about spatial consequences.

In this study I work toward an answer to the following general questions:

(1) Is abstract reason in Chinese achieved via metaphor mapping the concrete and physical onto the abstract and nonphysical? If the answer is positive, then how is it achieved?

(2) How is Chinese similar to or different from English in certain aspects of the conceptual system? I will particularly investigate two conceptual metaphors--the TIME-AS-SPACE metaphor and the Event Structure Metaphor--and the image schemas involved.

(3) If there exist commonalities and differences, as is expected, what reasons (cognitive or cultural) are there that can account for them?

I have chosen the TIME-AS-SPACE metaphor for detailed study because it has already been noted in various languages that notions of time are understood and expressed in terms of space (e.g. Clark 1973, Traugott 1978, Malotki 1983, Lakoff 1990, 1993a, 1994, Alverson 1994). But sufficient research on this phenomenon has not yet been done in Chinese (Alverson 1994 contains one study). Therefore, a thorough analysis of expression and conceptualization of time in Chinese will contribute to the establishment of the universal status of this cognitive phenomenon.

Lakoff (1990, 1993a, 1994) has noticed that in English the general conceptual metaphor of time is TIME PASSING IS MOTION. Specifically, time is understood in terms of things (i.e. entities and locations) and motion. The present time is at the same location as a canonical observer, with future times being in front of the observer and past times behind the observer. Either time or the observer is moving while the other is stationary. Therefore, as Lakoff specified, there are two special cases in English:

- 1) TIME PASSING IS MOTION OF AN OBJECT.
- 2) TIME PASSING IS MOTION OVER A LANDSCAPE.

In the first case, the observer is fixed, and times are entities moving with their fronts toward the observer. In the second case, times are fixed locations, and the observer is moving through them. Lakoff (1993a, 1994) also observed the phenomenon he called 'duality' where 'simultaneous mappings' may mix the two special cases in a single expression.

With respect to the study of time in Chinese, my specific questions are:

- (1) Is time conceptualized metaphorically in terms of space in Chinese?
- (2) Are the two special cases in the conceptualization of time, as observed by Lakoff (1993a, 1994), applicable in Chinese?
- (3) What similarities and differences are there between English and Chinese?
- (4) What reasons are there that can account for the similarities and differences?

I have chosen the Event Structure Metaphor for study because it constitutes a very complex metaphorical system in itself. In Lakoff's words (1993a: 220), 'This is a rich and complex metaphor whose parts interact in complex ways.' It includes abstract notions like states, changes, actions, causes, purposes, means, and difficulties. Lakoff and his students have found (Lakoff 1990, 1993a, 1993b, 1994) that these notions are characterized in English via metaphor in terms of space, motion, and force. He has suggested that the Event Structure Metaphor is his 'candidate for a

metaphorical universal' (1993a: 249). Therefore, it will be of great theoretical interest to see if a parallel situation exists in Chinese.

The Event Structure Metaphor may include the following mappings (from Lakoff 1993a):

States are locations (bounded regions in space).
 Changes are movements (into or out of bounded regions).
 Causes are forces.
 Actions are self-propelled movements.
 Purposes are destinations.
 Means are paths (to destinations).
 Difficulties are impediments to motion.
 Expected progress is a travel schedule; a schedule is a virtual traveler, who reaches prearranged destinations at prearranged times.
 External events are large, moving objects.
 Long term, purposeful activities are journeys.

There are also various sub-mappings under each of the above.

With regard to the Event Structure Metaphor, my specific questions are:

- (1) Are various aspects (states, changes, actions, causes, purposes, means, and difficulties, etc.) of event structure conceptualized metaphorically in terms of space, motion, and force in Chinese?
- (2) Is the above list of mappings found as it is in Chinese?
- (3) What similarities and differences are there between English and Chinese in this aspect?
- (4) What reasons are there that can account for the similarities and differences?

The source domain for both time and event structure dealt with here is space, which 'has become a fertile domain of investigation by cognitive scientists from disciplines spanning neurophysiology (Jeannerod 1994) to cognitive anthropology and comparative linguistics (Levinson 1991,

Svorou 1994)' (Sinha 1995: 7). However, the spatial domain is especially important to cognitive linguistics. In his 'Introduction' to the *Cognitive Linguistics* special issue (6-1) 'Spatial language and cognition 1', Sinha (1995: 7) writes:

The semantic and cognitive domain of space ... occupies a special place in the brief history of cognitive linguistics, and one need not seek far for the reasons. Cognitive semantics and cognitive grammar rest upon an essentially visuo-spatial conception of meaning and conceptualization, in which symbolic structures are derived from embodied constraints upon human perception and agency in a spatial field. Cognitive linguists were not the first to adopt a spatial or 'localist' conception of grammaticalized meaning, but their analyses surpass previous approaches both in comprehensiveness and in richness of detail.

Sinha (1995: 7) further points out why the domain of space should attract our special attention.

As we learn more both about the biological foundations of human spatial perception and cognition, and about the truly astonishing variation between languages in the way they express and schematize spatial meaning, we cannot fail to be struck by the thought that the spatial domain is a particularly rich one for empirical investigation both of possible linguistic and cognitive universals, and of possible cross-linguistic and cross-cultural cognitive differences.

The spatial domain is important not only in its own, but because it is commonly mapped into other more abstract domains, giving rise to spatial conceptualization of those more abstract domains in a metaphorical fashion. As Levinson (1991: 3) has commented, 'There are many reasons to think spatial conceptualization central to human cognition: spatial understanding is perhaps the first great intellectual task facing the child, a task which

human mobility makes mandatory, but above all spatial thinking invades our conceptualizations of many other domains as diverse as time, social structure and mathematics’.

How the spatial domain is mapped into each of those many other domains and in what way the mappings reflect human universality and cultural relativity are the questions that remain to be answered. The present study represents one effort in this direction.

In the past, the cognitive linguistic study of metaphor was criticized of its methodological weaknesses or limitations, such as introspective inspection, decontextualization, in addition to lack of cross-cultural and cross-linguistic perspectives (see, for instance, Fernandez 1991b, Quinn 1991). To try to get beyond these limitations I did the following with respect to my research methods. Instead of resorting to introspective inspection only, I collected my data from a naturalistic setting, mainly from *People's Daily*, the number one official newspaper in mainland China, and occasionally from some other publications, as well as from Chinese dictionaries. They were collected during a period of about three months of the summer of 1994. The examples actually cited in this study constitute only a very small portion of the data collected. I did not record the actual sources of the data, such as the page and the date of the newspaper from which a particular example is taken. This is mainly because I had to simplify some of the examples by chopping off some irrelevant details so as to keep them short and concise. In so doing, I made the examples simpler and more to the point. Furthermore, by cutting the original examples shorter, I saved the space for word-by-word gloss and

for more free version of translation. Thus, not all examples are 'original' as they are actually in the newspapers. However, my abridgements have, I believe, not changed their metaphorical structure. I feel it is fine as long as native speakers find them all in good and natural Chinese.

In dealing with the English translation I follow Malotki's (1983) practice of translating the Hopi examples. That is, 'stylistic excellence is not always envisaged as a desirable goal. Frequently, preference is given to a rather literal rendition which may be awkward from a stylistic point of view, but may be more revealing of the Hopi thought patterns involved' (11). I follow the same principle in translating the Chinese examples into English.

My study shows how time in Chinese is conceptualized in terms of space and motion, fit into the two-case model proposed by Lakoff (1990, 1993a, 1994) for English. It is found that Chinese and English bear great similarity in following the same principle of spatialization of time. My study also shows that in Chinese various aspects of event structure such as states, changes, causes, actions, purposes, means, and difficulties are conceptualized metaphorically in terms of space, motion, and force, just as in English (Lakoff 1990, 1993a, 1993b, 1994). The conceptual mappings at a high hierarchical level of the metaphor system are found the same in both English and Chinese, whereas the specific linguistic instantiations of those conceptual mappings may be similar or different between the two languages.

This study reinforces the view that metaphor is the main mechanism through which we comprehend abstract concepts and perform abstract

reasoning. It also supports the candidacy of the TIME-AS-SPACE metaphor and the Event Structure Metaphor for metaphorical universals. These two conceptual metaphors are grounded in some basic human experiences that may be universal to all human beings.

Finally, a word about how my study is arranged. After a detailed review of the contemporary theory of metaphor in Chapter 2, I make a thorough investigation of two metaphorical subsystems, namely, the TIME-AS-SPACE metaphor and the EVENT STRUCTURE metaphor in Chinese respectively in Chapters 3 and 4. Chapter 5 is the conclusion.

Notes:

¹ For a detailed review of this traditional view see Johnson 1981b.

² Of course, Lakoff and Johnson were influenced by earlier scholars. For instance, I. A. Richards (1981 [1936]: 50) argued that metaphor is 'the omnipresent principle of language'. However, Lakoff and Johnson have pushed the argument further ahead. According to the contemporary theory, metaphor is the omnipresent principle of cognition as well as language.

CHAPTER 2

THE CONTEMPORARY THEORY OF METAPHOR

2.1. Views of Metaphor: Classical vs. Contemporary

In classical theories, there are three main views of metaphor: the comparison view, the substitution view, and the interaction view. The comparison view can be traced back to Aristotle, who regarded metaphors as implicit comparisons between a metaphorical expression and a literal paraphrase based on underlying analogy or similarity. The substitution view, of which the comparison view is a special case according to Black (1962, 1993 [1979]), holds that a metaphor is where a metaphorical expression is used in place of some equivalent literal expression.¹ The interaction theory, proposed by Black (1962, 1993 [1979]), states that metaphorical meaning is a result of an interaction between a metaphorical expression, termed ‘focus’, and its ‘surrounding literal frame’ (1993 [1979]: 27). All these views share a common feature: they view metaphor as a linguistic phenomenon, and assume a fundamental distinction between literal and figurative (or metaphorical in its broad sense) senses.²

As Lakoff (1994) points out, a major difference between the contemporary theory of metaphor and the classical ones is based on the old literal-figurative distinction. Traditionally, the word *literal* is defined in terms of ‘an idealized and oversimplified model of language and thought’ to include all of the following four senses (Lakoff 1986b: 292):

Literal 1, or conventional literality: ordinary conventional language-contrasting with poetic language, exaggeration, approximation, embellishment, excessive politeness, indirectness, and so on.

Literal 2, or subject matter literality: language ordinarily used to talk about some domain of subject matter.

Literal 3, or nonmetaphorical literality: directly meaningful language--not language that is understood, even partly, in terms of something else.

Literal 4, or truth-conditional literality: language capable of 'fitting the world' (i.e. of referring to objectively existing objects or of being objectively true or false).

Going with the four-sense definition of *literal* is the following set of assumptions that has been proved to be false (Lakoff 1994: 43-44):

- (1) a. All everyday conventional language is literal, and none is metaphorical.
- b. All subject matter can be comprehended literally, without metaphor.
- c. Only literal language can be contingently true or false.
- d. All definitions given in the lexicon of a language are literal, not metaphorical.
- e. The concepts used in the grammar of a language are all literal; none is metaphorical.

The traditional definition of the word *literal* is wrong because

a huge system of everyday, conventional, conceptual metaphors has been discovered. It is a system of metaphor that structures our everyday conceptual system, including most abstract concepts, and that lies behind much of everyday language. The discovery of this enormous metaphor system has destroyed the traditional literal-figurative distinction, because the term literal, as used in defining the traditional distinction, carries with it all those false assumptions. (Lakoff 1994: 44)

Assuming the literal-figurative distinction, the traditional theory held that metaphor was mutually exclusive with the realm of ordinary everyday language: 'Everyday language had no metaphor, and metaphor used mechanisms outside the realm of everyday conventional language' (Lakoff 1994: 42). Over the centuries, the classical theory of metaphor was taken so much for granted that it came to be taken as 'definitional': 'The word *metaphor* was defined as a novel or poetic linguistic expression where one or more words for a concept are used outside of its normal conventional meaning to express a similar concept' (Lakoff 1994: 42).

The contemporary theory of metaphor, as Lakoff argues, 'is revolutionary in many respects' (1993a: 244). Lakoff and Johnson summarize the contrast between the traditional and contemporary views of metaphor as follows (1980: 3):

Metaphor is for most people a device of the poetic imagination and the rhetorical flourish--a matter of extraordinary rather than ordinary language. Moreover, metaphor is typically viewed as characteristic of language alone, a matter of words rather than thought or action. For this reason, most people think they can get along perfectly well without metaphor. We have found, on the contrary, that metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature.

In this way, Lakoff and Johnson have redefined the term metaphor. Since they argue that human thought processes are largely metaphorical, and that the human conceptual system is metaphorically structured and defined, metaphor in their sense is no longer a way of expression, but also a way of conceptualization. 'The word *metaphor* has come to mean "a cross-domain

mapping in the conceptual system” (Lakoff 1994: 43). Defined as such, ‘metaphor is pervasive in everyday language and thought’ (Lakoff & Johnson 1980: ix).

In the contemporary theory of metaphor, as Lakoff (1986b) has suggested, the term *literal* is restricted to the meaning of Literal 3, ‘the sense of being directly meaningful, without the intervention of any mechanism of indirect understanding such as metaphor or metonymy’ (293). Thus, according to Lakoff (1994: 44), a different sort of literal-metaphorical distinction can be drawn: ‘Those concepts that are not comprehended via conceptual metaphor might be called literal.’ With such a distinction, although ‘a great many common concepts like causation and purpose are metaphorical, there is nonetheless an extensive range of nonmetaphorical concepts’ (44). Therefore, sentences such as ‘The balloon went up’ and ‘The cat is on the mat’ are not metaphorical. ‘But as soon as one gets away from concrete physical experience and starts talking about abstractions or emotions, metaphorical understanding is the norm’ (44).³

2.2. Cognitive Linguistics and Cognitive Semantics

In the discipline of linguistics, the contemporary theory of metaphor is closely associated with cognitive linguistics, which comprises cognitive grammar (e.g. Langacker 1987, 1988a, 1991) and cognitive semantics (e.g. Johnson 1987, Lakoff 1987a, 1988, Sweetser 1990, Turner 1991). As a new school, cognitive linguistics departs from the mainstream generative linguistics in commitments and background assumptions (Lakoff 1989a, 1990, 1991). Generative linguists make a distinction between *competence*

and *performance*, keeping their focus of study on competence, i.e. on the internal representation of rules that generate grammatical sentences in the ideal speaker-hearer. Generativists see metaphor as deviant and parasitic upon normal language, believing that it cannot be studied in any reasonable or systematic way. Parmegiani (1988: 2) has noted that, to Chomsky,

metaphor is to be considered a kind of semi-grammatical phenomenon, which violates semantic rules, but which becomes a part of ordinary language competence through a change in the meaning of the referents. This point of view is actually reflective of another traditional perspective of metaphor, namely that it is a deviant phenomenon that can only be studied as such in the domain of rhetoric, stylistics, or pragmatics.

In short, in generative linguistics, metaphor, viewed as a semantically-deviant phenomenon, is either excluded from its study or relegated to the fringes of attention. But, as Mac Cormac (1985: 33) has argued, 'metaphor pervades language so extensively that any semantic theory that excludes metaphor fails as a linguistic theory by being far too narrow'. Danesi (1988b: ix-x) also maintained that 'a science of language or of the mind which excludes any consideration of metaphor will probably turn out to be of little lasting value'.

Cognitive linguistics, in contrast, 'sees language as making use of conceptual structure and general cognitive mechanisms' (Pütz 1992b: lii). The cognitive paradigm holds a set of common views on language and cognition including the following (Radden 1992, Rudzka-Ostyn 1993). It believes that natural language is a product of the human mind, based on the same organizing principles that operate in other cognitive domains. As one domain of human cognition, language is intimately linked with other

cognitive domains and as such mirrors the interplay of psychological, cultural, social, ecological, and other factors. Language structure depends on (and itself influences) conceptualization, the latter being conditioned by our experience of ourselves, the external world and our relation to that world. In other words, language is not just a system consisting of arbitrary signs, and its structure is motivated as part of our cognitive system and can be reasonably explained. Linguistic units are subject to categorization which commonly gives rise to prototype-based networks and critically involves metaphor and metonymy. Meanings of linguistic units are based on embodied experience with and within the real world, and can be characterized with respect to relevant knowledge structures such as those called folk models, cultural models, or cognitive models.

As Fesmire (1994b: 150) has summarized, having departed from the mainstream generative linguistics, which tends 'to depreciate the significance of actual linguistic *performances*, emphasizing instead linguistic *competence*',

a cognitive approach grapples with how human beings actually make sense of their world. The generative linguist would thus regard the cognitive linguist as dealing with *merely* performative phenomena. The cognitive linguist is cultivating a theory of the ecology of human understanding. In linguistics circles, a cognitive approach dwells in the stream of human experience rather than in a supposedly pure realm of form.

In short, 'cognitive linguistics is explicitly committed to articulating the embodied, encultured, and imaginative dimensions of meaning' (Fesmire 1994b: 150). Metaphor, therefore, stays in the focus of attention within the cognitive paradigm.

As Johnson (1989a, 1989b, 1993b) has defined it, cognitive semantics is part of cognitive linguistics, which focuses on the cognitive mechanisms and models that underlie and make possible our language activities. It hypothesizes that 'the alleged "higher" cognitive functions that are supposed to make meaning and reasoning possible are indeed continuous with and inseparable from our sensorimotor activities' (Johnson 1989a: 111). It claims that knowledge is embodied: 'our very conceptual system is grounded in and structured by various recurring patterns of our perceptual interactions, bodily orientations, movements and manipulations of objects' (Johnson 1993b: 414). A central task of cognitive semantics, then, is to examine the empirical evidence for embodied knowledge of this kind. To fulfill this task, cognitive semantics has worked out 'methods of analysis that make it possible for us to investigate the experiential grounding of our conceptual system and its irreducibly imaginative character' (421-22). As Johnson (1989a: 112) claims, 'What is new in cognitive semantics is the way in which it has been able to be more concrete and specific about the way in which structures of our perceptual interactions work their way up into our understanding of more abstract conceptual domains.'

The contemporary theory of metaphor should be viewed as product of this endeavor of cognitive linguistics in general and of cognitive semantics in particular.

2.3. Conceptual and Linguistic Metaphors and Metaphor Systems

What makes the contemporary theory of metaphor unique and superior to other theories is the important distinction that has been drawn between *conceptual metaphor* or *metaphorical concepts* on one hand, and *linguistic metaphors* or *metaphorical expressions* on the other hand (Lakoff & Johnson 1980). The former refers to those abstract notions such as ARGUMENT IS WAR and LOVE IS A JOURNEY while the latter is actual linguistic phrases that realize or instantiate those notions in one way or another. Metaphor, according to this theory, is fundamentally conceptual rather than linguistic in nature. Metaphorical language, consisting of specific linguistic expressions, is but a surface manifestation or realization of conceptual metaphor. Conceptual metaphors are systematic mappings across conceptual domains: one domain of experience, the source domain, is mapped onto another domain of experience, the target domain. 'In short, the locus of metaphor is not in language at all, but in the way we conceptualize one mental domain in terms of another' (Lakoff 1994: 43).

A major discovery of Lakoff and Johnson is that 'Because the metaphorical concept is systematic, the language we use to talk about that aspect of the concept is systematic' (1980: 7). For instance, under the metaphorical concept LOVE IS A JOURNEY, which is discussed in detail in Lakoff 1986a, 1994, and Johnson 1993b, there are these metaphorical expressions which are highly conventionalized in the daily language of English:

- (2) LOVE IS A JOURNEY.
 - a. Look how far we've come.
 - b. It's been a long, bumpy road.
 - c. We can't turn back now.
 - d. We're at a crossroads.

- e. We may have to go our separate ways.
- f. We're spinning our wheels.
- g. The relationship isn't going anywhere.
- h. Our relationship is off the track
- i. The marriage is on the rocks.

As is shown by (2), conventional metaphorical expressions are governed by conceptual metaphor in a systematic way. Lakoff argues that conceptual metaphor reflects 'a general principle' that is 'part of the conceptual system underlying English' (1994: 45-46). This principle for understanding the domain of love in terms of the domain of journeys can be stated as 'a metaphorical scenario' (Lakoff 1994: 46):

The lovers are travelers on a journey together, with their common life goals seen as destinations to be reached. The relationship is their vehicle, and it allows them to pursue those common goals together. The relationship is seen as fulfilling its purpose as long as it allows them to make progress toward their common goals. The journey is not easy. There are impediments, and there are places (crossroads) where a decision has to be made about which direction to go in and whether to keep traveling together.

The metaphor here is thus a conceptual mapping from a source domain (a journey) to a target domain (love), with both *ontological* and *epistemic* correspondences entailed by the mapping. The ontological correspondences are those in which the entities in the source domain are mapped onto the entities in the target domain, while the epistemic correspondences are those in which knowledge of the source domain is mapped onto knowledge of the target domain to form inference patterns. With the LOVE AS JOURNEY metaphor, for instance, the ontological correspondences between the two domains are as follows (from Johnson 1993b: 417):

- (3) a. The lovers correspond to travelers.
- b. The love relationship corresponds to the vehicle.
- c. The lovers' common goals correspond to their common destinations on the journey.
- d. Difficulties in the relationship correspond to impediments to travel.

The LOVE AS JOURNEY metaphor is thus 'a systematic mapping based on ontological correspondences such as these. This mapping gives rise to a set of epistemic correspondences in which knowledge of the source domain (journeys) is mapped onto knowledge of the target domain (love). Consequently, the way we conceptualize, reason about, and talk about our love relationship will be determined by these, and other, epistemic correspondences' (Johnson 1993b: 417).

In short, each metaphorical mapping at the conceptual level is a fixed set of ontological correspondences between entities in the source domain and those in the target domains. Once the fixed correspondences are activated, mappings can project source domain inference patterns onto target domain inference patterns, resulting in epistemic correspondences. In such a way, conceptual metaphors in our conceptual system form intricate systems. Lakoff believes that the study of systems of conventional conceptual metaphor is 'the most elaborate and conceptually radical branch of contemporary conceptual system research' (1994: 41-42). Lakoff and Johnson's (1980) methodology has demonstrated that such studies can be accomplished by close examinations of linguistic metaphors instantiating the underlying conceptual metaphors in our language. As they suggest (1980: 7), 'we can use metaphorical linguistic expressions to study the

nature of metaphorical concepts and to gain an understanding of the metaphorical nature of our activities'. With a new definition of metaphor given, Lakoff and Johnson have also provided a new methodology for the study of metaphor in a systematic way.

In the above it is shown that metaphorical expressions are systematically tied to a conceptual metaphor, with each of the former as a particular linguistic instantiation or manifestation of the latter. That is, each conceptual metaphor heads and governs a system of linguistic metaphors. The system of metaphor is highly structured by its ontological and epistemic correspondences operating across conceptual domains. The systematicity of metaphor, however, exists in a larger scope than described above. Not only are metaphorical expressions systematically governed by a conceptual metaphor, but conceptual metaphors may also be systematically related to each other to form a hierarchical structure. 'Metaphorical mappings do not occur isolated from one another. They are sometimes organized in hierarchical structures, in which "lower" mappings in the hierarchy inherit the structures of the "higher" mappings' (Lakoff 1994: 62). Lakoff calls this phenomenon 'metaphor inheritance hierarchies'. Given below is an example of such a hierarchy including the LOVE IS A JOURNEY metaphor (adopted from Lakoff 1994: 62):

- Level 1: The Event Structure Metaphor
- Level 2: LIFE IS A JOURNEY
- Level 3: LOVE IS A JOURNEY; A CAREER IS A JOURNEY

Here the two versions of metaphor at Level 3--LOVE IS A JOURNEY and A CAREER IS A JOURNEY--inherit the structure of the higher mapping at

Level 2--LIFE IS A JOURNEY--which is a more general metaphor containing the two metaphors at Level 3 as its more specific manifestations. The LIFE IS A JOURNEY metaphor may contain the following ontological correspondences or metaphorical mappings (from Winter 1995: 235):

<i>Source Domain</i>		<i>Target Domain</i>
JOURNEY		LIFE
traveler	-->	person
point of departure	-->	birth
initial conditions	-->	personal endowments
baggage	-->	personal problems
obstacles	-->	external difficulties
distance	-->	duration
distance covered	-->	accomplishments
destination	-->	life purpose
termination	-->	death

As Winter (1995: 235) points out:

The 'LIFE IS A JOURNEY' metaphor enables many different metaphorical expressions and patterns of inference. Thus, we try to give our children an education so they will get 'a good start' in life. If they act out, we hope that they are 'just going through a stage' and that they will 'get over it'. As adults, we hope they won't be 'burdened' (or 'saddled') with financial worries or ill health and, if they face such difficulties, that they will be able to 'overcome' them. We hope they will have a 'long lifespan' and that they will 'go far in life'. We know that, as mortals, they will 'go to their final resting place'.

Lakoff (1994) has cited the following English examples under the LIFE IS A JOURNEY metaphor:

- (4) a. He got a head start in life.
- b. He's without direction in his life.
- c. I'm where I want to be in life.
- d. I'm at a crossroads in my life.

- e. He'll go places in life.
- f. He's never let anyone get in his way.
- g. He's gone through a lot in life.

The conceptual metaphor LIFE IS A JOURNEY can thus summarize and account for many English idiomatic expressions such as cited above.

Since love is an important aspect of life, the LOVE IS A JOURNEY metaphor, therefore, inherits the structure of the LIFE IS A JOURNEY metaphor. As Lakoff (1994) points out, what is special about the LOVE IS A JOURNEY metaphor is that there are two lovers, who are travelers, and that the love relationship is a vehicle, while the rest of the mapping is a consequence of the LIFE IS A JOURNEY metaphor. In a similar vein, a career is another important aspect of life. So the CAREER IS A JOURNEY metaphor inherits the structure of the LIFE IS A JOURNEY metaphor just as the LOVE metaphor does. What is special about the CAREER metaphor, however, is that a successful career is always a journey UPWARD, since STATUS IS UP.

As shown above, the LIFE IS A JOURNEY metaphor is but a Level-2 metaphor, on top of which at Level 1 is the Event Structure Metaphor. According to Lakoff (1994), the event structure metaphor has events as its target domain and space as its source domain. Its general mapping in terms of ontological correspondences goes as follows (Lakoff 1994: 62):

- (5) a. States are locations (bounded regions in space).
- b. Changes are movements (into or out of bounded regions).
- c. Causes are forces.
- d. Actions are self-propelled movements.
- e. Purposes are destinations.
- f. Means are paths to destinations.
- g. Difficulties are impediments to motion.

- h. Expected progress is a travel schedule; a schedule is a virtual traveler, who reaches prearranged destinations at prearranged times.
- i. External events are large, moving objects.
- j. Long-term, purposeful activities are journeys.

It should be apparent that the LIFE IS A JOURNEY metaphor 'makes use of all the structure of the event structure metaphor, because events in a life conceptualized as purposeful are subcases of events in general' (Lakoff 1994: 63). Lakoff (1994: 62-63) describes the coherence of inference in the event structure metaphor and the inheritance involved in the LIFE IS A JOURNEY metaphor as follows:

In our culture, life is assumed to be purposeful, that is, we are expected to have goals in life. In the event structure metaphor, purposes are destinations and purposeful action is self-propelled motion toward a destination. A purposeful life is a long-term, purposeful activity, and hence a journey. Goals in life are destinations on the journey. The actions one takes in life are self-propelled movements, and the totality of one's actions form a path one moves along. Choosing a means to achieve a goal is choosing a path to a destination. Difficulties in life are impediments to motion. External events are large moving objects that can impede motion toward one's life goals. One's expected progress through life is charted in terms of a life schedule which is conceptualized as a virtual traveler that one is expected to keep up with.

Considering the above three-level metaphor system and metaphorical expressions that realize it linguistically, the ubiquity and systematicity of metaphor in human language and thought should be obvious. Little wonder that the contemporary theory of metaphor claims that metaphor is one of the essential elements constituting and structuring human cognition.

Lakoff (1994: 64) suggested that the ‘hierarchical organization is a very prominent feature of the metaphor system of English and other languages’, and that ‘the metaphors higher up in the hierarchy tend to be more widespread than those mappings at lower levels’. He proposed the event structure metaphor as his ‘candidate for a metaphorical universal’ (88). In Chapter 4 below, I will make a detailed study of the Event Structure Metaphor in Chinese. My study supports Lakoff’s proposal from the perspective of Chinese.

Now, the fundamental distinction between the traditional and contemporary theories of metaphor is obvious. The traditional approach studies metaphor as individual linguistic expressions or rhetorical devices: what artistic or aesthetic effects they have produced in a particular piece of discourse, which is primarily literary or poetic in nature. Just as Lakoff (1987d: vii-viii) points out, ‘traditional theories of metaphor assume that metaphors occur one by one, that each distinct metaphorical expression is individually created’. In the contemporary paradigm, on the other hand, metaphor is studied as systems of human conceptualization, operating deep in human thought and cognition and, at the same time, surfacing in everyday language in a systematic manner. On this view, metaphor in poetry or in literature at large is but a special case of metaphor in general, based on the same mechanisms (Lakoff & Turner 1989, Lakoff 1990, 1993a, 1994, Sweetser 1992, Turner 1987, 1991). Section 2.6 will return to this claim.

In this section it is shown that a new definition of metaphor has led to a methodological revolution.

2.4. Experiential Basis of Metaphor: The Notion of Embodiment

As Johnson (1987) and Lakoff (1987a) have argued, in the past the dominant philosophical tradition in the West was objectivism. In his review of Lakoff 1987a, Langacker (1988b: 384) describes the predominant status of objectivism in the West as follows:

For two millennia, the Western intellectual tradition has entertained a particular view of thought, reason, and rational inquiry that effectively divorce them from bodily experience. These are all manifestations of a world view which Lakoff calls OBJECTIVISM, and which is taken for granted by vast segments of the scholarly community. Objectivist assumptions are so pervasive as to be almost invisible, and so fundamental as to be virtually immune to challenge.

According to the objectivist doctrine (Hampton 1989, Johnson 1987, 1989a, Lakoff 1987a, etc.), the world consists of mind-independent objects which have determinate properties and stand in definite relations to each other. The nature of these objects is independent of the ways in which people experience and understand them. The world, therefore, can be described objectively, independent of any particular culture or observer's viewpoint. That is, there exists a God's-eye view of reality. Meaning, according to this view, is an abstract relation between symbolic representations and objective reality. The symbols are arbitrary and meaningless in themselves, but supposedly given meaning by virtue of their capacity to correspond to things, properties, and relations existing objectively in the world out there. Meaning, defined as the relation between words and those things in the world to which they refer, is thus fundamentally literal, holding a one-to-

one or mirror-image relationship with the external world. It follows that there can be no irreducibly figurative or metaphorical concepts, because metaphorical projections cut across basic experiential domains, and such cross-categorical projections are held to have no counterparts in the real world, which supposedly has discrete and definite categorical boundaries. The task for semantics, according to objectivism, is to describe the way in which words and utterances correspond to the real world. Human understanding, on the other hand, is distinguished from meaning, which is held to be objective and in no way dependent on any person's or community's understanding of it. Ideal understanding proceeds by building an internal representation that correctly mirrors external reality. Reason is just the mechanical manipulation of abstract symbols which are meaningful only via conventional correspondences to things in the world. Correct reason merely mirrors the logic of the external world.

The objective paradigm so described, as Lakoff points out (1987a: 157-58), is 'an idealization', brought from 'our intellectual background into the foreground'. Langacker (1988b: 388) further points out:

the power of the objectivist world view does not depend on anybody accepting it in its entirety. Rather, it works its influence through the pervasiveness and tacit acceptance of numerous attitudes, working assumptions, and methodological principles for which it can be recognized as the ultimate source. Even if, in its pure form, the objectivist philosophy is universally rejected, it is nonetheless the reference point with respect to which the actual world views of many scholars can be measured--it stands as the archetype that gives these views their coherence, shapes their research agenda in terms of both subject matter and approaches, and determines whether an idea is adopted as a default-case assumption or considered inherently suspect.

While criticizing objectivism, Lakoff (1987a) outlined an alternative called experientialism or experiential realism. According to him, experientialism and objectivism are two versions of 'basic realism', which is featured by a commitment to the existence of a real world and stable knowledge of it, and by a rejection of the view that the conception of truth is merely based on internal coherence, yielding the view that 'anything goes'. However, experientialism differs from objectivism in the definition of meaning. 'Where objectivism defines meaning independently of the nature and experience of thinking beings, experiential realism characterizes meaning in terms of *embodiment*, that is, in terms of our collective biological capacities and our physical and social experiences as beings functioning in our environment' (Lakoff 1987a: 266-67). Here the key concept is 'embodiment', a notion that has been most forcefully articulated by Johnson (1987, 1989a, 1989b, 1991, 1992, 1993b). Meaning is based on experience, especially bodily experience. Johnson (1989a: 109) argues:

I would like to note one very important fact that bears directly in the nature of meaning; namely, that every human being has a body. To be human is to be embodied, and our bodily interactions set out the contours of our world as we experience it. Consequently, the very possibility of our experiencing anything as meaningful depends upon the character of our bodily experience. What we can experience, what it can mean to us, how we understand that experience, and how we reason about it are all integrally tied up with our bodily being.

Johnson (1989a: 116) further emphasizes that the notion of embodiment is key to understanding as well as meaning:

A theory of meaning is a theory of understanding, and understanding is the totality of the ways in which we experience and make sense of our world in an ever-evolving process. Understanding is not

achieved merely by entertaining and reflecting on sentential/propositional structure alone. Rather, from birth we develop an understanding of our world through our bodily encounters, using the sensorimotor capacities available to us, and all of this perceptual input affects our grasp of anything whatever as meaningful.

In brief, then, our world is not something objectively given. Instead, 'it is something "construed" by human cognition' (J. Taylor 1995: 4). For this reason, J. Taylor (1995: 4) argues, 'It is "construals of the world" that are properly regarded as the object of linguistic semantics'.⁴

The experientialist view of reason as being embodied in its context is summarized in the following passage from Lakoff 1987a (xv).

On the experientialist view, reason is made possible by the body--that includes abstract and creative reason, as well as reasoning about concrete things. Human reason is not an instantiation of transcendental reason; it grows out of the nature of the organism and all that contributes to its individual and collective experience: its genetic inheritance, the nature of the environment it lives in, the way it functions in that environment, the nature of its social functioning, and the like.

In short, experientialism assigns a central role to bodily experience in meaning, understanding, and reasoning. It holds that human knowledge arises out of the interaction between the experiencing organism and the experienced environment. The locus of that interaction is the human body; the human body is the result of such interaction. That is, 'we have always existed only in and in relation to our evolving environment. We are what we are at this instant, and our world is what it is at this instant, only

because of our embodied interactions' (Johnson 1991: 8). Therefore, it is necessary to put the body back into the mind (Johnson 1987).

In line with experientialism in philosophy, the contemporary theory of metaphor maintains that human conceptual systems are to a large extent metaphorical in the sense that they contain mappings of inference patterns from typically more concrete domains to typically more abstract domains. It insists that such metaphorical mappings are not arbitrary, but constrained by our embodied nature. That is, metaphor is motivated by, and grounded in, our bodily experience--how our bodies function in and interact with the world (e.g. Johnson 1987, 1989a, 1989b, 1991, 1992, 1993b, Fesmire 1994b, Lakoff 1987a, 1990, 1993a, 1993b, 1994). The basic idea is that 'conceptual structure has everything to do with one's body and with how one interacts as part of one's physical environment' (Lakoff 1994: 42).

The evidence supporting the claim that metaphor is constrained by human bodily experience in the real world has been discovered in various target domains. But it stands out most prominently in the domain of emotions. Numerous studies have shown that human emotions are conceptualized metaphorically in terms of bodily processes or activities (e.g. Emanatian 1995, Fesmire 1994a, King 1989, Kövecses 1986, 1988, 1990a, 1990b, 1991, 1995, Lakoff & Kövecses 1987, Matsuki 1995, Shyu 1989, Yu 1995).

It seems that cognitive linguists have put more emphasis on the interactive aspect of the grounding of meaning because they were criticized in the past for having neglected the cultural and social aspects of human understanding and reduced it to the biological or physiological only.

Therefore, according to Johnson (1992: 347), this interaction is ‘at once biological, social, cultural, economic, moral, and political. ... Thus, the way things can be meaningfully understood by us depends, in large measure, on the kinds of bodies we have and the ways we interact with our physical and social surroundings’. Apparently, efforts have been made to make certain terminology more explicit to include the sense of interaction between the body and the environment. For instance, Fesmire (1994b: 153) made the following interpretation of certain terms:

So, cognitive semantics’ view of the ‘body in the mind’ is neither a mentalism nor a physicalism, although terminology may sometimes stand in the way of the experientialism or interactionism at work here. For example, the term *body* is used to talk about everything from brute physiological processes to our more refined organic interactions with envioning conditions. This twofold sense of body has generated some misunderstanding, such as the accusation that cognitive semantics reduces human understanding and experience to the merely physiological. This serious misunderstanding might be curtailed by substituting such terms as *physiological* and *embodied*. *Physiological* designates what is more prototypically understood as the body, and *embodied* expresses the rich sense of an encultured, interactive body

To explicitly stress the importance of the interaction between the body and the cultural and social environment in the grounding of metaphorical mappings, cognitive linguistics is bound to expand its scope of investigation of human cognition across linguistic and cultural boundaries.

2.5. Image Schemas and the Invariance Principle

When metaphorical mappings are said to be not arbitrary, it means that they are, in large measure, constrained by the so-called image schemas

(or image schemata). Johnson 1987, according to Lakoff (1987a: 271), 'makes an overwhelming case for the embodiment of certain kinesthetic image schemas'. As Johnson defines it, 'An image schema is a recurring, dynamic pattern of our perceptual interactions and motor programs that gives coherence and structure to our experience' (1987: xiv). Image schematic structures, which are central in the organization of meaning and in the formation of inferences based on that meaning, have two characteristics: they are nonpropositional and imaginative in character. That is, they are preconceptual schematic structures that emerge from our bodily experience and that are constantly operating in our perceptual interaction, bodily movement through space, and physical manipulation of objects. Generated as 'typical structures of recurring aspects of human bodily experience', image schemas 'play a crucial role in what we take as meaningful and in how we reason' (xxxvii); they 'make it possible for us to experience, understand, and reason about our world' (19).

As pointed out by Johnson (1987), image schemas are recurrent patterns that 'emerge from our constant and usually unnoticed encounters with physical containment' (22), and therefore, they are relatively few in number, predominantly visual, though not tied to any single perceptual modality. However, image schemas are not concrete rich images: they 'have a generality that raises them a level above the specificity of particular rich images' (24). As Johnson (1987: 28-29) summarizes,

Image schemata exist at a level of generality and abstraction that allows them to serve repeatedly as identifying patterns in an indefinitely large number of experiences, perceptions, and image formation for objects or events that are similarly structured in the relevant ways. ... In sum, image schemata operate at a level of

mental organization that falls between abstract propositional structures, on the one side, and particular concrete images, on the other.

Structurally, image schemas are ‘extremely skeletal’ (Turner 1990: 250), possessing a limited number of parts or components which stand in fixed relations to one another. They include, for instance, CONTAINERS, PATHS, LINKS, BALANCE, SCALARITY, OBJECTS, FORCES, etc. Some image schemas also represent various spatial orientations and relations: UP-DOWN, FRONT-BACK, PART-WHOLE, CENTER-PERIPHERY, etc. Some others are dynamic in nature, denoting a rising motion, or a dip, or an expansion, for instance (Turner 1990).⁵ All of these, as recurring patterns of ordering or organizing our experience, are “embodied”, meaningful at a non-propositional level. ‘But the flexibility of these sensorimotor structures makes it possible for them to be drawn up into the structuring of more abstract concepts, propositions, and patterns of inference’ (Johnson 1992: 349). A good example is the PATH or SOURCE-PATH-GOAL schema, which consists of three elements: a source point A, a terminal point B, and a vector tracing a path between them. The three basic elements stand in a definite relation, specified as a force vector moving from A to B. This schema, as Johnson points out (1987: 28),

is a recurrent structure manifested in a number of seemingly different events, such as: (a) walking from one place to another, (b) throwing a baseball to your sister, (c) punching your brother, (d) giving your mother a present, (e) the melting of ice into water. For each of these very different cases, we have the same schema with the *same basic parts and relations*. In (e) the schema must be interpreted metaphorically, with points A and B representing state (e.g., solid and liquid) of a substance (water).

As seen in the above example, an image schema, which is 'more general, abstract, and malleable' (28) than a concrete rich image, can characterize 'many similar, but different, situations that manifest a recurring underlying structure' (30). In this sense, image schemas 'operate as organizing structures of our experience and understanding at the level of bodily perception and movement' (20). Johnson (1987: 29-30) suggests that there are two important respects in which image schemas are dynamic: (a) they organize our experience in ways that we can comprehend; and (b) they are flexible in that they can take on any number of specific instantiations in varying contexts.

The pervasiveness of image schemas in our experience is well reflected in our language. The following well-known passage from Johnson 1987 is a good example of how the CONTAINER schema, which consists of a boundary distinguishing an interior from an exterior, is reflected in our language talking about daily experience (30-31):

Consider just a small fraction of the orientational feats you perform constantly and unconsciously in your daily activities. Consider, for example, only a few of the many *in-out* orientations that might occur in the first few minutes of an ordinary day. You wake *out* of a deep sleep and peer *out* from beneath the covers *into* your room. You gradually emerge *out* of your stupor, pull yourself *out* from under the covers, climb *into* your robe, stretch *out* your limbs, and walk *in* a daze *out* of the bedroom and *into* the bathroom. You look *in* the mirror and see your face staring *out* at you. You reach *into* the medicine cabinet, take *out* the toothpaste, squeeze *out* some toothpaste, put the toothbrush *into* your mouth, brush your teeth *in* a hurry, and rinse *out* your mouth. At breakfast you perform a host of further *in-out* moves--pouring *out* the coffee, setting *out* the dishes, putting the toast *in* the toaster, spreading *out* the jam on the toast,

and on and on. Once you are more awake you might even get lost *in* the newspaper, might enter *into* a conversation, which leads to your speaking *out* on some topic.

Especially interesting here are phrases such as '*out* of a deep sleep', '*out* of your stupor', '*in* a daze', '*in* a hurry', and '*into* a conversation', which contain nonspatial senses of spatial terms. These are instances of metaphorical projections of the CONTAINER schema in our understanding of abstract states. Abstract states are interpreted as spatially bounded entities. The power of image schemas lies in the fact that we can metaphorically extend them from the physical to the nonphysical so as to structure and order our experience in abstract domains. In the following are some more examples from Johnson (1987: 34):

- (6) a. Tell me your story again, but leave out the minor details.
(STORY EVENT AS CONTAINER)
- b. I give up, I'm getting out of the race. (RACE EVENT AS CONTAINER)
- c. Whenever I'm in trouble, she always bails me out. (STATE AS CONTAINER)

These examples further illustrate how a single image schema, as a recurring organizing structure, can help us understand and structure different kinds of experiences and reason about them.

In Lakoff 1987a, the image-schematic structure is treated as one of the two preconceptual structures in our bodily experience that give rise to conceptual structure, the other one being basic-level structure.⁶ According to Lakoff (1987a: 278), image schemas should have the following qualifications: they are (a) pervasive in experience, (b) well-understood because it is pervasive, (c) well-structured, (d) simply structured, and (e)

emergent and well-demarcated. The image-schematic and basic-level structures are those that 'are directly meaningful ... because they are directly and repeatedly experienced because of the nature of the body and its mode of functioning in our environment' (268). The recognition of the fact that preconceptual structures are directly meaningful can answer the questions why abstract concepts are understood and how abstract reason is achieved. Abstract conceptual structure arises from image-schematic and basic-level structure by metaphorical projection from physical domain to abstract domain, and by projection from basic-level categories to superordinate and subordinate categories. That is, 'Abstract conceptual structures are indirectly meaningful; they are understood because of their systematic relationship to directly meaningful structures' (268). In other words, meaningfulness is embodied. It has 'dual preconceptual foundations in bodily experience: basic-level structures and kinesthetic image schemas' (268). In short, as Lakoff points out, 'Image schemas provide particularly important evidence for the claim that abstract reason is a matter of two things: (a) reason based on bodily experience, and (b) metaphorical projections from concrete to abstract domains' (275). That is, image schemas structure our experience preconceptually, and are mapped by metaphors into abstract domains, with their basic logic preserved. In such a sense, metaphors are not arbitrary, but are motivated by structures inhering in everyday bodily experience.

To illustrate his point, Lakoff cited the example of the PURPOSES ARE DESTINATIONS metaphor. The metaphor is motivated by 'a structural correlation in everyday experience' (277): we go to a place, i.e. our

destination, to fulfill a purpose. Therefore, 'there is an isomorphism between the structural correlation and the metaphorical mapping' (278), as follows:

Source Domain		Target Domain
movement to a destination	-->	achievement of a purpose
Location A/starting point	-->	the initial state
Location B/end point	-->	the desired state/purpose
motion along a path	-->	action sequence

Here the metaphor is based on the SOURCE-PATH-GOAL schema, one of the most common schemas that emerges from our constant bodily functioning. The mapping seems natural because the connection between the source and target domains is motivated by experience. Thus, Lakoff (1987a: 278) summarizes:

The point is this: Schemas that structure our bodily experience *preconceptually* have a basic logic. *Preconceptual* structural correlations in experience motivate metaphors that map that logic onto abstract domains. Thus, what has been called abstract reason has a bodily basis in our everyday physical functioning. It is this that allows us to base a theory of meaning and rationality on aspects of bodily functioning.

What Lakoff claims is that those image schemas which structure our experience of space also structure our concepts in abstract domains: 'When we understand something as having an abstract structure, we understand that structure in terms of image schemas' (283). For instance, as he maintains, categories are understood in terms of CONTAINER schemas, hierarchical structure in terms of PART-WHOLE and UP-DOWN schemas, relational structure in terms of LINK schemas, radial structure in categories

in terms of CENTER-PERIPHERY schemas, foreground-background structure in terms of FRONT-BACK schemas, etc. Lakoff calls his claim 'The Spatialization of Form hypothesis' (283):

Strictly speaking, the Spatialization of Form hypothesis requires a metaphorical mapping from physical space into a 'conceptual space'. Under this mapping, spatial structure is mapped into conceptual structure. More specifically, image schemas (which structure space) are mapped into the corresponding abstract configurations (which structure concepts). The Spatialization of Form hypothesis thus maintains that conceptual structure is understood in terms of image schemas plus a metaphorical mapping.

He then concludes that image schemas play two roles: 'They are concepts that have directly-understood structures of their own, and they are used metaphorically to structure other complex concepts' (283).

The recognition of the pervasive function of image schemas as the basis for metaphorical mappings led to the formulation of the Invariance Hypothesis, which was later revised and renamed as the Invariance Principle (Lakoff and Turner 1989, Lakoff 1990, 1993a, 1994, Turner 1990, 1992, 1993).⁷ It was proposed as the general constraint on metaphorical mappings 'which has to do with the forms of our experience and with how these forms structure our thoughts' (Turner 1992: 727). Lakoff (1990: 54) first formulated the Invariance Hypothesis as: 'Metaphorical mappings preserve the cognitive topology (this is, the image-schema structure) of the source domain'. Turner (1990, 1993), however, believed that this version of the Invariance Hypothesis was too strong and potentially misleading because the image-schematic structure of the source is not always preserved and mapped into the target domain in its entirety.

The difference between the source and target domains in the metaphorical mapping is described with regard to the LIFE IS A JOURNEY metaphor (Turner 1990: 253-54):

Consider LIFE IS A JOURNEY. There is a path in the source domain, and it is mapped onto the target. That path in the source has image-schematic structure. But much of this image-schematic structure is simply not mapped onto the target. For example, it is part of the image-schematic structure of the path that the path is fixed. It is independent of our traversal of it. Traversing the path does not create or destroy the path. Consequently, we can meet a fork in the path, choose one fork, take a step, change our mind, step back, and take the other fork. Metaphorically, meeting a fork corresponds to coming upon alternatives. But the fixity of the fork does not map over onto the fixity of the alternatives. Many of our decisions are irrevocable. Shall we boil this egg or scramble it? Shall we marry Tom or Harry? In these cases, the rejected alternative disappears the moment we engage in the chosen alternative. If we boil the egg, we cannot then scramble it, and if we scramble it, we cannot then decide to boil it. Metaphorically, one of the forks is destroyed the moment we step down the other. We cannot take a step back and be again at the metaphoric fork in the road, *because the fork doesn't exist anymore*. The metaphoric path, unlike the source path, changes as a result of being traversed. The fixity of the path in the source, its independence of our traversing it, is not mapped over onto the target. The reason it cannot be mapped onto the target in these cases is that to do so would violate the image-schematic structure of the target. In the source, there is preservation, which is image-schematic structure. In the target, there is destruction, which is image-schematic structure. To map the source preservation over onto the target destruction would be to violate the image-schematic structure of the target, and so we do not map that part of the image-schematic structure of the source.

According to Turner, 'the strongest acceptable version of the constraint is: *In metaphoric mapping, for those components of the source and target domains determined to be involved in the mapping, preserve the image-*

schematic structure of the target, and import as much image-schematic structure from the source as is consistent with that preservation' (254). Lakoff then revised the hypothesis as the Invariance Principle (1993a: 215): 'Metaphorical mappings preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain.'

An important corollary of the Invariance Principle, according to Lakoff (1993a, 1994), is that image-schematic structure inherent in the target domain cannot be violated, and that inherent target domain structure limits the possibilities for mappings automatically. The phenomenon is called 'the target domain overrides'. In the metaphor ACTIONS ARE TRANSFERS, for instance, actions are conceptualized as objects transferred from an agent to a patient. But with the target domain overrides, the agent can 'give' the patient 'a kick' without the latter's having it afterward. Turner (1990: 252) also pointed out that as a general constraint on metaphor, the Invariance Principle is not inviolable, but the violation is to be taken as 'a carrier of significance', which is found in novel metaphors only.

According to Lakoff (1990, 1993a, 1994), the Invariance Principle raises the possibility that a great many, if not all, abstract inferences are actually metaphorical versions of spatial inferences inherent in the structures of image schemas. That is, metaphors based on image schemas give rise to abstract reasoning, and abstract reasoning is based on spatial reasoning via metaphorical projections of image schemas. Lakoff (1990, 1993a, 1993b, 1994) has demonstrated in English that what have been

called propositional structures or abstract concepts such as time, states, changes, causes, purposes, and categories are really understood via metaphor in terms of spatial concepts structured by image-schemas. As he suggests, 'These are concepts that enter normally into the grammars of languages, and if they are indeed metaphorical in nature, then metaphor becomes central to grammar' (1993a: 212). Consequently, the Invariance Principle has put the nature of abstract reason into new perspective: 'what have been seen in the past as propositional inferences are really image-based inferences' (Lakoff 1993a: 229). If the Invariance Principle is correct, Lakoff (1993a: 229) claims, it has a remarkable consequence: 'Abstract reasoning is a special case of image-based reasoning'. 'Image-based reasoning is fundamental and abstract reasoning is image-based reasoning under metaphorical projections to abstract domains' (229). If Lakoff is right, then much of our semantic system is metaphorical, as well as much of our conceptual system.

According to Lakoff (1990), part of the cognitive commitment is to characterize what abstract concepts are, how they can be understood, and how abstract reason could have been acquired by human beings. The Invariance Principle provides an answer to these questions, since 'it claims that many abstract concepts arise from metaphorical mappings of spatial concepts and that abstract reason arises via metaphorical mapping when the cognitive topology of image-schemas is preserved by the mapping, which in turn preserves the inferential structure of those spatial concepts' (73). As Lakoff pointed out, abstract reasoning is that aspect of human beings that has traditionally been taken as separating man from the lower animals, but

that activity of human brain has evolved from certain mechanisms for the perception of spatial relations that appear to be present in lower animals. He concludes (1990: 73):

From the evolutionary point of view, of course, it would not be surprising if human reason were to use and build on mechanisms for representing spatial relations that are present in lower animals. Indeed, the idea that abstract reason makes use of spatial perceptual mechanisms present in lower animals makes much more sense than the idea that reasoning came in all at once with man as a totally separate new cognitive faculty. The idea that abstract reason also evolved just makes more biological sense.

At the present stage, however, the Invariance Principle is still, as Lakoff (1990: 72) put it quite a few years ago, ‘an empirical hypothesis’, and ‘its status is anything but clear’, ‘since a precise formulation would require knowledge of the full inventory of image-schemas’. Moreover, it is still not clear as to how strong this principle is: whether or not all abstract inferential structure is image-schematic; and whether or not image-schematic structure is only one of a number of aspects of generic-level structure (Lakoff 1990). The answer to these questions requires cross-linguistic and cross-cultural research as well as thorough investigation within linguistic and cultural boundaries.

2.6. Conventional and Novel Metaphors

In their *More than Cool Reason*, Lakoff and Turner’s (1989) central claim is that metaphor in poetry is not an essentially different phenomenon from metaphor in ordinary language; poetic metaphor basically uses the same cognitive mechanisms as everyday metaphor; and what makes poetic

metaphor look different, however, is its extension, elaboration, and combination of those mechanisms in ways that go beyond the ordinary. They argue, therefore, that creative literary metaphor generally depends on conventional metaphor in generation and interpretation. According to them, there are three basic mechanisms for interpreting linguistic expressions as novel metaphors: extensions of conventional metaphors, generic-level metaphors, and image metaphors. Poetic metaphor uses all of them superimposed on one another.

A good example of novel extension of a conventional metaphor, as cited by Lakoff (1993a), is a line of the song lyric:

(7) We're driving in the fast lane on the freeway of love.

This line, apparently, is a novel extension of the conventional metaphor LOVE IS A JOURNEY. The understanding of the former is a consequence of the preexisting metaphorical correspondences of the latter. As Lakoff argues, a conventional metaphor, as a fixed pattern of ontological correspondences across conceptual domains, defines an open-ended class of potential correspondences across inference patterns. 'When activated, a mapping may apply to a novel source domain knowledge structure and characterize a corresponding target domain knowledge structure' (210). At the lexical level, lexical items conventional in the source domain may or may not be conventional in the target domain, depending on whether or not the ontological correspondences between two domains are activated. That is, 'each source domain lexical item may or may not make use of the static mapping pattern. If it does, it has an extended lexicalized sense in the target domain, where that sense is characterized by the mapping. If not, the

source domain lexical item will not have a conventional sense in the target domain, but may still be actively mapped in the case of novel metaphor' (211). Those lexical items that have gained a conventional sense in the target domain are referred to as polysemies, i.e. words with related senses. The words *freeway* and *fast lane* in (7) above are not conventionally used in the domain of love, but they comprise a novel extension of the conventional metaphor LOVE IS A JOURNEY.⁸

As Lakoff (1993a) has cited, examples of novel extension of conventional metaphor are also found in the following lines of poems:

- (8) a. In the middle of life's road
I found myself in a dark wood.
(Dante: *Divine Comedy*)
- b. Two roads diverged in a wood, and I --
I took the one less traveled by,
And that has made all the difference.
(Robert Frost: *Stopping by Woods on a Snowy Evening*)

Here, (8a) is an instance of novel extension and combination of two conventional metaphors: LIFE IS A JOURNEY and KNOWING IS SEEING. (8b) extends and elaborates the first of these two. In Sweetser's words (1992: 707), 'literary metaphors are creative uses of precisely those metaphors that shape our everyday language and thought', and this is because 'literary language is not "another language" from everyday language'; in effect they 'coexist as aspects of the varied language use of a single community' (706). As Sweetser has suggested, being a powerful artistic structure in literature, metaphor is not merely a literary tool, but also generally basic to cognitive

and linguistic structures. Therefore, 'we can't understand literary metaphor outside of its context in language structure' (708).

Another type of metaphors that are common in poetry is called 'image metaphors' (Lakoff 1987c, 1990, 1993a, Lakoff and Turner 1989), those 'that function to map one conventional mental image onto another' (Lakoff 1993a: 227). According to Lakoff, image metaphors are 'one-shot' metaphors, mapping only one image onto one other image. In such metaphors, 'The words are prompts for us to perform a conceptual mapping between conventional mental images', and such a mapping 'can lead us to map knowledge about the first image onto knowledge about the second' (230). What is worthy of note is that image-mapping metaphors work in just the same way as all other metaphors, by mapping the structure of one domain onto the structure of another. What is special about them is that their domains are conventional mental images. However, conventional mental images are structured by image schemas, which are preserved by image metaphors. That is to say, both conventional metaphors and image metaphors are unified under the general Invariance Principle, which states that metaphors preserve the image-schematic structure of the source domain in a way that is consistent with the inherent image-schematic structure of the target domain.

According to Lakoff and Turner (1989), novel metaphors, often found in literature, also include a type called 'generic-level metaphors'. They have found that the so-called personification in literature, by and large, demonstrates 'a single pattern: events (like death) are understood in terms of actions by some agent (like reaping). It is that agent that is

personified' (Lakoff 1993a: 232). This phenomenon is then summarized by a very general metaphor *EVENTS ARE ACTIONS*, which is constrained such that the action must have the same 'overall event shape' or 'generic-level structure' as the event. Lakoff and Turner have also studied proverbs and found that they all involve 'generic-level schemas', which are preserved by metaphoric projection from the source domain to the target domain. Both generic-level structures and generic-level schemas, according to Lakoff (1993a), may be image-schematic structures. If that is the case, then the Invariance Principle is operating here too, constraining the generic-level metaphors.⁹

Lakoff (1993a) argues that our everyday metaphor system is constantly active, and is used maximally in interpreting novel metaphorical uses of language. This is because literary language shares much with ordinary language, and artistic usage with everyday usage. As Sweetser (1992: 722) concludes, 'There are thus strong arguments in favor of approaching artistic metaphor together with everyday metaphor, even via everyday metaphor.'

More generally, 'everyday language and literary language are not separate domains', and 'discoveries about one bear on the other' (Lakoff 1987d: vii).

2.7. Summary of Findings of the Contemporary Theory

The summary of research findings provided here is based on Lakoff 1993a and 1994. Having resulted from the studies conducted under the contemporary theory of metaphor in the past decade and a half, it addresses

three aspects of metaphor: its nature, its structure, and its properties. In terms of its nature, metaphor is fundamentally conceptual, not linguistic. Metaphorical language is merely a surface manifestation of conceptual metaphor. Much of our conceptual system is metaphorical, although a significant part of it is nonmetaphorical. Metaphorical understanding is built up on nonmetaphorical understanding. As a basic cognitive structure, metaphor allows us to understand a relatively abstract or inherently unstructured subject matter in terms of a more concrete, or at least a more highly structured subject matter. In fact, many subject matters, from the most mundane to the most abstruse scientific theories, can only be comprehended via metaphor. In short, metaphor is the main mechanism through which we comprehend abstract concepts and perform abstract reasoning.

Structurally, metaphors are mappings across conceptual domains. Such mappings are asymmetric in that they are one-directional, involving projections from a source domain to a target domain. They are partial in that only part of the structure of the source domain is projected to the target domain. Each metaphorical mapping is a fixed set of ontological correspondences between entities in the source domain and entities in the target domain. When those fixed ontological correspondences are activated, mappings can project source domain inference patterns onto target domain inference patterns. Metaphorical mappings are not arbitrary, but grounded in the body and in everyday experience and knowledge. A conceptual system contains thousands of conventional metaphorical mappings, which form a highly structured metaphorical subsystem of the conceptual system.

Metaphorical mappings, with both conceptual and image mappings, all obey the Invariance Principle: The image-schema structure of the source domain is projected onto the target domain in a way that is consistent with inherent target domain structure.

In its current sense of the contemporary theory, metaphor has the following important properties, among others. First, the system of conventional conceptual metaphor is mostly unconscious, automatic, and is used constantly, with no noticeable effort, just like our linguistic system and the rest of our conceptual system. This metaphor system plays a major role in both the grammar and lexicon of a language. It is central to our understanding of experience and to the way we act on that understanding. Second, novel or poetic metaphor is, for the most part, an extension of our everyday conventional system of metaphorical thought, constrained by the same principle as the conventional metaphor. Third, metaphorical mappings vary in universality; some seem to be universal, others are widespread, and some seem to be culture-specific.

2.8. Criticisms of the Contemporary Theory

Ever since its birth about a decade and a half ago, the contemporary theory of metaphor has grown increasingly influential in the interdisciplinary field of metaphor studies. It has also received some criticisms (e.g. Holland 1982, Mac Cormac 1985, Wierzbicka 1986, Jackendoff & Aaron 1991, Quinn 1991, Alverson 1991, Indurkha 1992, Kennedy & Vervaeke 1993, Cacciari & Glucksberg 1994) from different

theoretical and disciplinary perspectives along its way of development. In this section I examine a few representative criticisms.

It seems that some criticisms have stemmed from different theoretical views regarding what counts as a metaphor. The focus of study of the contemporary theory is on (1) conceptual metaphors in human conceptual system and (2) conventional metaphors in everyday language, which were largely ignored by more traditional theories of metaphor. In the contemporary theory, it is believed that metaphor is primarily conceptual in nature and that conventional metaphors at the linguistic level yield important clues to human thought and cognition. The rejection of these two beliefs will surely lead to the denial of the central claim of the contemporary theory that human conceptual system is fundamentally metaphorically structured.

This central claim has been challenged, for instance, by Wierzbicka (1986). Citing the conceptual metaphor LOVE IS A JOURNEY, Wierzbicka argued that the journey metaphors are not applicable to the entire range of the use of the term *love*. Instead, their use is limited to the kind of love between, say, erotic partners while not applicable to the love between a mother and a child. ‘This means that “journey” is not in any way included in the semantic invariant of the concept “love”’ (291). Wierzbicka (1986: 292) proposed the following ‘REAL’ definition of *love* which is free of metaphor:

(9) X loves (person) Y. =

when X thinks of Y, X feels good feelings towards Y

X feels that he wants to be with Y

X feels that he wants to cause good things to happen to Y

As this definition suggests, people can have a clear concept of love without having experienced journeys. This is because, Wierzbicka argued, mental experiences are given to us more directly than physical ones, and our inner world is more familiar and more accessible to us than the external world. Therefore, we know and understand love without the mediation of the journey metaphors, which are used only ‘for talking about love’ (297).

It should be admitted that Wierzbicka was right when she said that the LOVE IS A JOURNEY metaphor is not applicable to the entire range of the use of the term *love*, and that she provided a nonmetaphorical definition of *love* in (9) above. However, it should also be noted that this nonmetaphorical definition of *love* is only one definition, and that it does not represent all there is of human cognition or conceptualization of *love*. In his reply to Kennedy and Vervaeke (1993), who denied the claimed constitutive role of metaphor in human cognition, Johnson (1993b) emphasized that ‘the structure of a concept is not an all-or-nothing matter’, and that ‘it is not the case that conceptual structure either pre-exists in a finished and fixed realm of its own, or else that it is all radically constructed’ (418). Instead,

As with our concept *love*, most of our basic concepts are defined by multiple conceptual metaphors that are sometimes mutually inconsistent (though not incoherent). There will always be pre-existing conceptual structure in both the source and target domains (as the invariance hypothesis acknowledges), but conceptual metaphor will also be partially constitutive of our cognition of the target domain, by virtue of additional structure carried over from the ‘logic’ of the source domain. (418)

Johnson further pointed out that ‘cognitive semantics never claims that image-schematic structures and metaphors are all there is to cognition’, and rather, it only claims that ‘this is a crucial, insufficiently explored, and undervalued dimension of meaning’ (421).

So, it is obvious that the LOVE IS A JOURNEY metaphor cannot replace the nonmetaphorical definition of *love* in (9) provided by Wierzbicka; it nevertheless enriches human understanding of, and reasoning about, the concept of *love*, in a particular aspect. It carries part of the structure of the source domain (journey) over into the target domain (love), which has its own pre-existing structure. It is worth reminding that the contemporary theory of metaphor is superior in one aspect: it has discovered the hierarchical structure of metaphor, as discussed previously in 2.3. In this structure, the conceptual metaphor LOVE IS A JOURNEY, which governs a system of metaphorical expressions, is but a subsystem of higher metaphorical system LIFE IS A JOURNEY, which, in turn, is but a subsystem of the even higher system, the Event Structure Metaphor. This discovery has attached even greater importance to metaphor in human cognition.

The fact that a nonmetaphorical definition of *love* such as in (9) is inadequate for human conceptualization of *love* and that metaphorical projection of partial structure from a source domain is essential is also evidenced by Wierzbicka’s (1986: 300-6) discussion of such prepositional phrases as *in love*, *in pain*, *in despair*, etc. Wierzbicka contested Lakoff and Johnson’s (1980) claim that nonphysical is typically conceptualized,

metaphorically, in terms of the physical, as demonstrated in (10) (from Lakoff and Johnson 1980: 59):

- (10) a. Harry is in the kitchen.
 b. Harry is in the Elks.
 c. Harry is in love.

According to Lakoff and Johnson (1980: 59-60), there is a difference among these three sentences with respect to conceptual structuring:

The concept IN of the first sentence emerges directly from spatial experience in a clearly delineated fashion. It is not an instance of a metaphorical concept. The other two sentences, however, are instances of metaphorical concepts. The second is an instance of the SOCIAL GROUPS ARE CONTAINERS metaphor, in terms of which the concept of a social group is structured. This metaphor allows us to 'get a handle on' the concept of a social group by means of a spatialization. The word 'in' and the concept IN are the same in all three examples; we do not have three different concepts of IN or three homophonous words 'in'. We have one emergent concept IN, one word for it, and two metaphorical concepts that partially define social groups and emotional states.

Wierzbicka, however, disagreed that the word *in* is used in the three sentences in the same sense; particularly, she disagreed that the expression *in love* is metaphorical. She argued, 'Plain common sense indicates that expressions such as *in love*, *in pain* or *in despair* don't refer to place. They refer to certain psychological states' (302). But, there exists ample evidence that abstract states *are* conceptualized in terms of bounded locations in space, as in the Event Structure Metaphor (Lakoff 1990, 1993a, 1993b, 1994). Now let us look at Wierzbicka's own interpretation of the 'emotional' *in* as opposed to the 'locational' *in* (305):

I would speculate that something like the following (subconscious) reasoning may operate here. First, the form 'in N_{emotion}' is more marked, more unusual than the ordinary Adj_{emotion} or Verb_{emotion}. This in itself may suggest a marked form of the emotion. Second, the idea of place ('in') evokes the image of something surrounding the person from all sides. Normally, an emotion (designated by an adjective or a verb) is viewed as something that takes place within a person. If the linguistic form seems to suggest a reversal of the image (a person surrounded by something instead of something 'enclosed' within a person) the impression can easily arise that the feeling is intense, that it is stronger and more overwhelming than would normally be expected, and also that the normal relationship between a person and his emotions is reversed, so that the emotions, instead of being subject in some measure to the person's control, assume power over him. Finally, the image of a person being 'in' something (rather than out) may invite the idea of restrictions on this person's movements (and, possibly, on his field of vision): when we are outside we can go whenever we like; but when we are inside a house, our freedom of movements is circumscribed by the four walls.

As can be seen, the passage is packed with spatial metaphors. And that is typical metaphorical conceptualization of emotions. What Wierzbicka was doing is mapping the structure of space onto the structure of emotions, and that is metaphorical mapping in the sense of Lakoff and Johnson (1980). This metaphorical mapping, as illustrated by Wierzbicka's interpretation in the above passage, is cognitively constitutive of the understanding of emotions in a partial way. Wierzbicka denies the metaphorical nature of the phrase *in love* because she maintains a different definition of metaphor from Lakoff and Johnson's. Lakoff and Johnson believe that metaphor is primarily conceptual in nature whereas linguistic expressions are byproducts of the conceptual level. On the other hand, Wierzbicka treats metaphor as 'a linguistic device ... which by definition can't convey

meaning in a fully explicit manner' (294). To her, metaphor only provides ways of 'talking about' things. It is therefore primarily linguistic rather than conceptual in nature.

Lakoff (1990: 46) attributed his difference with Wierzbicka to their difference in initial commitments: 'Because we start out with different primary commitments, Professor Wierzbicka and I are likely to disagree on many matters. Her primary commitment is inconsistent with the theory of conceptual metaphor, prototype theory, the theory of basic-level concepts, etc. It is therefore inevitable that we will disagree on these and other matters'. That is, different initial commitments will inevitably lead to different conclusions.

In their review of Lakoff and Turner 1989, Jackendoff and Aaron (1991) insisted that the term *metaphor* is used too broadly in the book. To them, what is called conventional metaphors should not be taken as metaphorical. Rather, they believed that 'the traditional insight about the literal incongruity of metaphors is worth preserving' (326). Thus, they drew a distinction between 'LT-metaphors' (i.e. what Lakoff and Turner count as metaphors) and 'I-metaphors' (i.e. 'the more standardly acknowledged as metaphorical' based on the criterion of 'literal incongruity') (326), arguing that only I-metaphors are real metaphors. For instance, DEATH IS DEPARTURE is a LT-metaphor, but its status as an I-metaphor is relativized across cultures. In many cultures where death is viewed literally as the soul (or person) passing on to its next existence, DEATH IS DEPARTURE is not an I-metaphor, but a literal belief.

Jackendoff and Aaron also argued that some LT-metaphors should not count as metaphors in the first place. They believed that Lakoff and Turner's 'basic metaphors' such as STATES ARE LOCATIONS, PURPOSES ARE DESTINATIONS, TIME MOVES are not metaphors, but instances of 'Thematic Relations Hypothesis' (see also Jackendoff 1983, Ch 10), which claims that

the conceptual structures expressed by natural language are organized in terms of a set of abstract parameters that are most clearly revealed in language about space, but that apply to many other semantic fields as well. It is not that space is taken as a METAPHOR that supplements or enriches the conceptualization of these fields; rather, this common organization is the ONLY way we have of conceptualizing them. (328)

According to Jackendoff and Aaron, the equations such as STATES ARE LOCATIONS, PURPOSES ARE DESTINATIONS, TIME MOVES (i.e. LT-metaphors) are not based on 'mapping of incongruous domains' but on 'thematic parallelism' (329-30), so they are not I-metaphors. In short, they could not agree with the 'excessively broad notion of metaphor' (331) of Lakoff and Turner (1989), who, 'having drained from the term "metaphor" much of its traditional content', 'have created a theoretical construct so broad and unstructured that the term "metaphor" may no longer be appropriate' (331).

Regarding the equation DEATH IS DEPARTURE, Jackendoff and Aaron were certainly right when they pointed out that there exists some cross-cultural relativity as to whether it is a metaphor. In cultures where DEATH IS DEPARTURE is taken as literal belief, i.e. the belief that spatial movement is involved in death, this equation certainly is not a metaphor. The key to the definition of metaphor in the contemporary theory is the notion of

‘semantic autonomy’ (Lakoff and Turner 1989). If a concept is understood in its own terms and hence semantically autonomous, it is not metaphorical. If, on the other hand, a concept is understood in terms of another concept or concepts, it is not semantically autonomous and therefore is a metaphor. Jackendoff and Aaron of course would not accept this definition for being ‘excessively broad’. They preferred, instead, ‘the standard sense’ of metaphor which, as can be seen from the above quotation, cannot be ‘the ONLY way we have of conceptualizing’ things, but in one way or another ‘supplements or enriches the conceptualization’. This is also apparent in Jackendoff’s (1983: 209) response to the view that the theory of thematic relations reveals widespread systems of metaphor in our language and thought: ‘But I think this debases both the theory of thematic relations and the concept of metaphor, for, unlike metaphor, thematic relations are not used for artistic or picturesque effect’. However, as Ortony 1975 and Fainsilber and Ortony 1987 have shown, metaphors serve at least three communicative functions, of which one is *inexpressibility* (namely, metaphors may allow one to express that which would be difficult or impossible to express if one were restricted to literal uses of language), the other two being *compactness* and *vividness*. Apparently, Jackendoff and Aaron’s view that metaphors merely provide alternate ways of talking about something put them on the same side of the issue as Wierzbicka. This view caused them to believe that many conventional metaphors are not really metaphorical since they constitute the ONLY way of conceptualization.

Mac Cormac's (1985) criticism of Lakoff and Johnson 1980 also stemmed from his view that conventional metaphors (or 'dead metaphors' in his terms) should be regarded as literal rather than metaphorical. This view of his is apparent in his distinction between literal and metaphorical language.

Literal language seeks to use established categories (including those derived from dead metaphors) to describe the natural world in common terms that can be universally comprehended. Metaphorical language seeks to create new suggestive ways of perceiving and understanding the world and involves a conceptual process different from that of literal description. (78)

He argued that most of the examples of metaphor presented by Lakoff and Johnson are 'dead metaphors' which have already faded into literal language. If they are also taken as metaphorical, it amounts to saying that all language is metaphorical, whereas he believed that a literal-metaphorical distinction is essential in explaining how new meanings are derived via metaphor with literal meanings as given and how language changes in such a process.

Regarding this criticism of Mac Cormac's, Indurkha (1992: 296) wrote the following critique, which is very much to the point.

The main objective of Lakoff and Johnson's study was to show that metaphor is a powerful tool in shaping the cognitive world that we experience. For this objective, conventional metaphors, even 'dead' metaphors, are quite important, since they bring evidence that even what we take to be the conventional and ordinary description of the world is actually brought about by a metaphor, even though the metaphor might not be alive and vibrant today. It is the conventional metaphors that demonstrate that metaphors are not something that occur only in the domains of poetry, art, and flowery language, but are an indispensable part of everyday language and concepts. Given

that, it seems quite logical that Lakoff and Johnson would include conventional metaphors under the rubric of 'metaphor'.

Mac Cormac's criticism of Lakoff and Johnson utterly fails to appreciate this important point. He regards metaphors to be non-conventional use of language that results in new meanings, and, from this point of view, he is vehemently arguing that what Lakoff and Johnson are calling metaphors are not metaphors at all.

While Mac Cormac's view that only novel metaphors are real metaphors served his purpose to show how novel metaphors derive their meanings, he failed to realize that there exist at least four different senses of 'literal' (see 2.1 above). The problem with him is that he muddled all four senses up and came to the conclusion that conventional metaphor cannot exist (Lakoff 1986b).

In addition to the above criticism, Mac Cormac also opposed Lakoff and Johnson's account of how abstract concepts are structured metaphorically in terms of spatial concepts which are directly emergent from our bodily experience. He argued that even the delineation of the spatial is cultural, emerging 'in linguistic forms that are already culturally mediated and transmitted' (67). For illustration, he cited Lakoff and Johnson's (1980: 161) own example of front-back orientation relative cross-culturally:

Given a medium-sized rock in our visual field and a ball between us and the rock, say a foot from it, we would perceive the ball as being *in front of* the rock. The Hausas make a different projection than we do and would understand the ball as being *in back of* the rock. Thus, a front-back orientation is not an inherent property of objects like rocks but rather an orientation that we project onto them, and the way we do this varies from culture to culture.

Mac Cormac (1985: 68) then asked: 'If some spatial concepts vary from culture to culture, how can we have any certainty that spatial concepts emerge directly? It seems more like a mediated, indirect emergence, which Lakoff and Johnson would call metaphorical' (see also Indurkha 1992 for similar criticism).

The answer to Mac Cormac's question is that the experiential view of cognition never claimed that all spatial concepts emerge directly, and that some of them *are* indeed metaphorical in nature, just as shown by the above example cited by Lakoff and Johnson. Cognitive semantics maintains that human cognition and conceptual structure are *embodied*, i.e. they arise from, and are tied to our preconceptual bodily experiences. Researches within the cognitive paradigm have shown that 'although the physical configuration and neurophysiological apparatus of human beings give us all a common starting point for the way we experience the world, our perceptions of it are differentiated by individual cultures' (Allan 1995: 13). While the spatial domain is surely the source domain for metaphors mapping into more abstract domains, it is also the domain currently under investigation for possible cross-linguistic and cross-cultural universals and differences (see, e.g., Allan 1995, Ameka 1995, Brown & Levinson 1993, Heine 1995, Levinson 1991, 1992a, 1992b, Pederson 1995, Regier 1995, Sinha et al. 1994, Sinha & Thorseng 1995, Svorou 1994, Wilkins & Hill 1995).

Allan's 1995 study is a case in point. It is shown in this study that the word *back* in English is defined as 'that part of a body opposite the interactive-side' (11). It is originally defined 'on an anthropomorphic

model of the prototypical human being in upright stance confronting the world by looking forward and walking forward', and is metaphorically 'extended to the corresponding proper parts of vertebrate and invertebrate animals and to inanimate objects such as houses, cupboards, and computers' (11). With cupboards or computers, the front is always the door or screen side, which is the interactive side, while the back is the opposite side. With houses, the back is usually opposite the side with the main entrance. But in some cultures, it can be the house roof, conceptualized on a 'zoomorphic' model in which the back is 'roughly horizontal and facing skyward like an animal's back' (19). Relevant to Lakoff and Johnson's example of the rock is the following conceptualization: 'If a static concrete inanimate object is assigned no intrinsic front, the part or region of the object facing the human viewer is contingently named *the front*, and the part or region on the opposite side or end of the contingent front is named *the back*' (22). This is because 'The characteristics of the canonical encounter between humans are transferred to the encounter between a human being and a nonhuman object, with the result that the viewer faces the front of the object, and it confronts him/her' (22). This is the case in most languages, but one alternative, selected in Hausa (Chadi), Kiswahili (Bantu), and Maasai (Eastern Nilotic), is to imagine the object 'facing the same direction as (i.e. aligned with) the human viewer', i.e., 'the human viewer faces the backs of things' (22). 'It is a matter of cultural convention whether the viewer is facing the front of the object or its back' (22). Allan's conclusion is that 'the uses and meanings of English *back* are motivated by our cognitive modelling of the world and that they evidence a powerful

anthropocentric image of “the body in the mind” of humankind’ (11). A similar study of spatial terms *in front of* and *behind* is in Kalisz 1990, which also shows ‘an experiential grounding of terms expressing space orientation’ (167).

Finally, I consider the criticism raised by Noami Quinn, a cognitive anthropologist, in her ‘The cultural basis of metaphor’ (1991). She criticized Lakoff and Johnson for the tendency ‘to neglect altogether the organizing role of culture in human thought, or to grant culture, at best, a residual or epiphenomenal place in their accounts’ (57). She was opposed to their assigning a constitutive role to metaphor in human understanding. Instead, she argued that metaphors are used only to fit preexisting cultural models, which are ‘presupposed, taken-for-granted models of the world that are widely shared (although not necessarily to the exclusion of other, alternative models) by the members of a society and that play an enormous role in their understanding of that world and their behavior in it’ (Quinn & Holland 1987: 4). In her own words, ‘metaphors, far from constituting understanding, are ordinarily selected to fit a preexisting and culturally shared model’, and that they ‘do not typically give rise to new, previously unrecognized entailments, although they may well help the reasoner to follow out entailments of the preexisting cultural model and thereby arrive at complex inferences’ (60). Citing her own study of the cultural model of American marriage (see also Quinn 1987), she insisted that it is the cultural model that commands the selection of metaphors:

particular metaphors are selected by speaker, and are favored by these speakers, just because they provide satisfying mappings onto already existing cultural understandings--that is, because elements

and relations between elements in the source domain make a good match with elements and relations among them in the cultural model. (65)

Thus, 'conventional metaphors' have become 'conventional' only because 'they are satisfying instantiations of a "conventional" or culturally shared model, capturing multiple elements of that model' (79). In conclusion, Quinn claimed that 'metaphor plays a comparatively minor role in constituting our understanding of our world, and that a relatively major role in constituting this understanding is played by cultural models of that world' (91).

So, while Quinn's conclusion did not completely deny the constitutive role of metaphors in human understanding, which is at least in part in accordance with cognitive semanticists' claim that metaphors partly constitute our understanding of the world, she laid special emphasis on the major role of cultural models in constituting this understanding, claiming that cultural models actually constrain the selection of metaphors. She was certainly right.

The contemporary theory claims that metaphors are rooted in our bodily experience. Here, 'bodily experience' should be interpreted in a broad sense, referring to our bodily function and interaction with the outside world, and our knowledge so derived. However, the bodily experience can only tell what are possible metaphors. Whether these potential metaphors are actually selected in a given culture is largely dependent upon the cultural models shared by individuals living in this culture. The use of sports metaphors, which are typically rooted in our bodily activities, should serve as an illustration. In American English,

sports have always been a favorite source domain for metaphors in everyday and political discourse (see, for instance, Hardaway 1976, Howe 1988, Ching 1993).¹⁰ The reason is apparent, as Hardaway (1976: 78) saw it:

Nobody would argue the place of sports in American life; they are big business. And they are big business because they fit philosophically with the widely accepted American dream of open competition in a free market economy. Americans believe in competition, foster it, and encourage it. They live by its rules. No wonder the language of athletic competition has found its way as metaphor into every aspect of American life.

In Chinese, sports metaphors have enjoyed increasing popularity in the past 15 years or so when reform has remarkably raised the nation's level of competition in both economy and sports. That is, the increasing popularity of sports in an improving economic environment has brought about increasing popularity of sports metaphors. However, there exist some variations between the American and Chinese cultures as to which athletic events are more likely to be source domains for sports metaphors. According to Howe (1988), for instance, the most popular sports metaphors in American political discourse are from American football, baseball, and boxing. On the other hand, my own observation in Chinese has singled out volleyball, soccer, and pingpong as common source domains for sports metaphors in Chinese political and everyday discourse. It is hard to imagine, for instance, that American football metaphors should enjoy popularity in Chinese while most Chinese people do not know what a 'touchdown' is.

My own study (Yu 1995) of metaphorical expressions of anger in English and Chinese should also be a case in point. It is demonstrated that English and Chinese share the same central metaphor ANGER IS HEAT, which then breaks into two subversions in both languages. Whereas English has selected FIRE and FLUID metaphors, Chinese uses FIRE and GAS for the same purpose. The difference of the FLUID vs. GAS metaphors between English and Chinese is explained in terms of the theory of *yin* and *yang*. The reason for Chinese to have chosen the GAS over the FLUID metaphor is categorization. The fundamental contrast between *yin* and *yang* has cast fire and gas on one hand, and water and all other fluids on the other, into two opposing categories. The former is naturally related to heat, whereas the latter is closely associated with cold. Thus, the theory of *yin* and *yang* in the Chinese culture has functioned as the underlying cultural model which has dictated the selection of metaphors. While the FIRE, FLUID, and GAS metaphors are all grounded in our bodily experience, the culturally shared model among Chinese has constrained the actual selection of metaphors: FIRE and GAS are selected rather than FIRE and FLUID as in English.

While I am in complete agreement with Quinn's conclusion that cultural models play a major role in constituting our understanding of the world and constrain the selection of metaphors, I would like to raise a question that challenges her belief that metaphors only play a minor role in constituting our understanding of the world and are ordinarily selected to fit or satisfy the preexisting cultural models. My question is: Could the cultural model, or culturally shared understanding, itself be metaphorical or free of metaphor? When it is said that 'An underlying metaphor for life

in the United States is LIFE IS PLAYING A GAME' (Ching 1993: 43), is this metaphor the culturally shared understanding in the American culture that controls the GAME and PLAY metaphors which are pervasive in American English? Is this metaphor entrenched in the middle of the cultural model shared by American people in their understanding of American life? A positive answer seems to make more sense. Again, is the theory of *yin* and *yang* (the two Chinese words literally mean 'feminine/negative' and 'masculine/positive' respectively) a theory free of metaphor? Or, is the theory itself a giant metaphor that constitutes a metaphorical way of conceptualizing and categorizing the world for people who accept the theory? It seems that the answer is negative to the former and positive to the latter. If, in short, a cultural model or culturally shared understanding could be metaphorical in nature, then the role played by metaphor in human understanding would consequently be major as well.

Having commented on Quinn's criticism, I would like to discuss the relationship between anthropology and linguistics, of which both are involved in the study of language. However, as Quinn and Holland (1987) have discussed, these two disciplines have different focuses of study and their approaches may proceed in opposite directions. For linguists, 'cultural models promise the key to linguistic usage', whereas for anthropologists, 'linguistic usage provides the best available data for reconstruction of cultural models' (Quinn & Holland 1987: 24). In the past, as Keesing, an anthropologist, has pointed out (1992: 593), 'Linguistics and anthropology have had a curious, dialectical relationship, sometimes coming together in productive conjunctures, sometimes drifting apart'. He

suggested that 'after a long period of estrangement, anthropology and linguistics are overdue for a reconciliation which could be productive for both disciplines' (593). The period of reconciliation and dialogue has come after the emergence of cognitive anthropology and cognitive linguistics which are now sharing an area of common ground and working 'toward each other's positions from opposite directions' (MacLaury 1995: x). Both cognitive anthropologists and cognitive linguists are trying to account for human understanding and human cognition. Assumably, however, there are at least two kinds of human understanding. One is culturally shared understanding based on cultural models of the world received across individual minds within a particular culture. The other is universally shared understanding based on common human experience of the world. But these two kinds of understanding are merely 'two sides of the same coin, each side illuminating the other' (Keesing 1992: 601). If cognitive anthropologists and cognitive linguists have their emphasis on one side over the other, their contributions to their common endeavor to account for human cognition are complementary, rather than confrontational, to each other. It is simply what MacLaury (1995: x) calls 'a natural division of labor' within the same task.

For instance, it seems reasonable to argue for a distinction between the 'enculturated' meaning and the 'embodied' meaning based on the distinction between culture and biology. Nevertheless, the distinction between culture and biology is not so clear as it seems to be, as Turner (1994: 99) argued:

If meaning is structured and guided by the mapping of the body in the brain, then it is not possible to separate human culture from

human bodies. Culture is patterns of activity in brains; brains are structured in accord with their bodies; therefore culture, which is activity in brains, is structured in accord with the bodies in which it resides. Conversely, brains are in various ways developed under cultural experience, such as experience of language. A certain amount of our actual neurobiology is inseparable from culture.

That is, culture and biology are mutually dependent and coexistent. For this reason, a complete study of human meaning must include both 'enculturated' and 'embodied' meaning, so as to reveal the whole picture of human cognition in terms of how it is relative across different cultures and universal among all human beings.

2.9. Questions Faced by the Contemporary Theory

In his review of *Metaphors We Live By* (Lakoff & Johnson 1980), Lawler (1983: 205) had this to say about the significance of the book to the field of metaphor research. 'From the viewpoint of a metaphor researcher, this book is clearly a milestone, but it does not point in any particular direction for further research--rather, it points in many directions. One obvious suggestion is that other languages than English should be treated along the lines which Lakoff and Johnson lay down.' In spite of the obvious suggestion, similar research has not been carried out satisfactorily in other languages, to say the least.

As I see it, the contemporary theory of metaphor still faces two major questions that call for cross-linguistic and cross-cultural research. The first is whether abstract human reasoning is at least partially a metaphorical version of imagistic reasoning. Lakoff (1990: 39) sees this as 'a major question for future research in cognitive linguistics'. There exists

some evidence suggesting that such abstract concepts as time, states, changes, causes, purposes, quantity scales, and categories are characterized metaphorically (Lakoff 1990, 1993a, 1993b, 1994). But to what extent? The existing evidence is mainly from English. But is it true in other languages as well? And to what extent is it true in other languages?

The second question is that of universality vs. relativity. According to Lakoff (1993a: 245), 'Metaphorical mappings vary in universality; some seem to be universal, others are widespread, and some seem to be culture specific'. But it is still unknown as to what and how conceptual metaphors are universal, widespread, or culture-specific.

Since, as argued, human understanding, meaning, and reasoning are grounded in our embodied experience, and since basic bodily experience should be common among all human beings, it can be hypothesized that there exist cognitive universals, as well as linguistic universals. On the other hand, since bodily experience always interacts with specific physical, social, and cultural environments, it is also expected that there should be cognitive variations across cultures and languages. However, to what extent and in what manner cognitive universals and variations exist across cultures and languages is still a largely unexplored area.

Regarding the lack of cross-linguistic and cross-cultural studies, Johnson (1992: 354)¹¹ has made the following incisive statement:

Given the nature of our bodies and brains, and given the kinds of physical and cultural interactions we engage in because of the kinds of interests and purposes we have, there may well be universal image schemas, metaphorical concepts, or cognitive structures. Whether there are such universals is an *empirical* issue. The cross-cultural studies that could identify such empirical universals have simply not

been carried out extensively enough at the present time. So, we cannot make any strong assertion along these lines. Neither, however, can we deny their existence. We will only know the answer when we do the necessary cross-cultural research.

...
Whether certain conceptual metaphors, image schemas, or cognitive prototypes are universal, as I believe, awaits further study.

Johnson's statement summarizes the situation of cognitive semantics: Cognitive semantics has reached a point where it has to be supported by cross-cultural research.

My study presented in the next two chapters attempts to make a contribution to this end.

Notes:

¹ Another view that is similar to the substitution view is called 'the incoherence view' by Cacciari and Glucksberg (1994). According to them, the incoherence view has at least two distinct versions associated, separately, with generative semantics and pragmatics (speech act theory). 'Both versions consider metaphors to be incongruous or otherwise defective statements, either semantically or pragmatically' (456). The underlying assumption is that some rules, syntactic, semantic or pragmatic, are violated in metaphors, and are 'corrected' during comprehension when some kind of substitution is applied depending on the particular version. In the generative semantic version, the literal interpretation of the utterance is replaced by a literal paraphrase of the metaphoric interpretation. In the pragmatic version, the literal interpretation of the utterance is rejected, upon its uninterpretability, and replaced by a metaphoric interpretation.

² For discussions and critiques of these theories, see Black 1962, 1993 (1979), Cacciari and Glucksberg 1994, Nuessel 1988, Parmegiani 1988, Searle 1981 (1979), etc. One comment made by Parmegiani (1988: 4) on the traditional views of metaphor makes a good point about their status in current research on metaphor: 'While the traditional theories of metaphor

do not, in isolation, constitute comprehensive theories of metaphor, they do (when considered together) shed some valuable light on the workings of this enigmatic verbal phenomenon. In other words, they should not be considered as “opposing” views, but rather as components of an overall model of metaphor.’

3 The contemporary theory of metaphor mainly focuses its study on metaphor, the archetype of figurative language, and to a less extent on metonymy. However, other tropes of figurative language, such as irony, hyperbole, understatement, oxymoron, as well as idioms, are also studied within its theoretical framework. See, for instance, Gibbs 1993, 1994a, and 1994b.

4 The notion of ‘construal’, as in J. Taylor (1995), is a term taken from Langacker (1987: 487-88), who defines it as ‘the relationship between a speaker (or hearer) and a situation that he conceptualizes and portrays’. According to J. Taylor (1995: 4), this notion ‘implies a more active role of the language user in organizing and structuring his or her world’ than Jackendoff’s (1983) notion of ‘projected world’, which first appeared in Richards (1981 [1936]).

5 In addition to Johnson and Lakoff’s works, Krzeszowski 1993 provides an overview of various image schemas in terms of their ‘axiological parameter’. According to Krzeszowski (1993: 325), image-schemas are bi-polar, i.e. they have a plus pole and a minus pole. Being is plus; not being is minus. For instance, WHOLE, CENTER, LINK, BALANCE, IN, GOAL, UP, FRONT, RIGHT are plus; PART, PERIPHERY, NO LINK, IMBALANCE, OUT, NO GOAL, DOWN, BACK, LEFT are minus. It is argued that axiological concepts emerge from the axiological poles of preconceptual image schemas through metaphorical extensions.

6 In Lakoff 1987a, ‘Basic-level categories are defined by the convergence of our getalt perception, our capacity for bodily movement, and our ability to form rich mental images’ (267). ‘The basic level is an intermediate level’ (270). For instance, such natural kinds as tigers, cows, water, gold, are all basic-level categories. So are these human artifacts: chairs, tables, houses, books, lamps, coats, cars, etc. Besides, *running*, *walking*, *eating*, *drinking*, etc. are basic-level actions whereas *tall*, *short*, *hard*, *soft*, *heavy*, *light*, *hot*, *cold*, etc. are basic-level properties.

7 Brugman 1990 is a critique of Lakoff's 1990 version of Invariance Hypothesis. Brugman suggested that 'it is logically possible for there to be domains of knowledge which are structured entirely by one or more metaphorical mappings' (259), i.e. these mappings actually create the target-domain structure and the target-domain concepts are understood purely metaphorically. She mentioned that 'abstractions such as TIME are candidate domains' (259) although their existence still needs to be proven.

8 See Lakoff (1993a: 237-38) and Gibbs (1994a: 6-8) for more examples and discussions of novel extensions of conventional metaphors in poetry.

9 Also see Turner (1991: Ch 7) for a detailed discussion of generic-level metaphors, image metaphors, and the Invariance Principle.

10 The great popularity of sports metaphors in American English has led to the publication of a dictionary of sports metaphors *Sports Talk* (Palmatier & Ray 1989), which contains more than 1,700 entries.

11 Johnson 1992 argues that cognitive semantics has wide-ranging philosophical implications since what it reveals about the imaginative structure of concepts bears directly on the nature of meaning and human understanding. For critiques of Johnson 1992 and his reply see Gorayska 1993, McLure 1993, Sinha 1993, and Johnson 1993a.

CHAPTER 3

THE TIME-AS-SPACE METAPHOR IN CHINESE

3.1. Conceptions of Space and Time

Space and Time have been the subjects of serious study down the ages. From ancient days to modern times, philosophers and scientists have spoken or written extensively on the subjects from different standpoints, although no final conclusion or consensus has yet been reached. In the history of human thought, the conceptions of space and time have figured prominently among the most fundamental notions of philosophy. They have been ‘bound up with the foundations of the universe’, and have been regarded by philosophers of different times and schools as ‘one of the sources of the world’, as ‘a priori forms of intuition’, or as ‘universal forms of existence of matter’ (Akhundov 1986: 1). Spatial and temporal notions have also occupied a vital position in modern science. ‘In physics, for example, which has become the vanguard of the natural sciences, space and time are regarded as basic concepts, because most physical notions are introduced by means of operational rules employing spatial and/or temporal distances’ (Akhundov 1986: 1).

Space and time are concepts very tightly interwoven with each other, as Samuel Alexander (1859-1938) insisted that ‘space is in its very nature temporal and time spatial’ (from Keshavmurti 1991: 36). Linguistically, space and time are always treated as grammatically parallel, coordinated by a conjunction such as in the subject NP of this sentence. However, since the two concepts are so closely tied to each other, the coordinate phrase is

sometimes reduced to a coordinate compound, such as *spacetime* and *spatiotemporal* in English. Despite the fact that space and time are treated as parallel conceptually and linguistically, they do not seem to stand on a completely equal footing. To illustrate the point, I cite a popular definition of 'space' and 'time' as follows:

Space is commonly regarded as something that is around us and above us, and Time as something that flows on forever. (Keshavmurti 1991: 1)

In this definition, 'space' is defined literally in its own terms while 'time' is defined metaphorically by resorting to a spatial metaphor. The paradox for time is that we cannot really see it when it 'flows on forever'. Little wonder that the author of *Space and Time*, the book which contains the above definition, starts the book with this as its first sentence: 'Time is a paradox; we seem to know it, yet we hardly know it; it is so warm and intimate, yet so cold and aloof' (Keshavmurti 1991: v).

The fact that time is a notion which is well known but hard to define is also well exemplified by St. Augustine's (A.D. 353-430) question and answer concerning time (from Keshavmurti 1991: 35):

What is time? I know what it is if no one asks me what it is; but if I want to explain it to someone who has asked me, I find that I do not know. Nevertheless, I can confidently assert that I know this: that if nothing passed away there would be no past time, and if nothing were coming there would be no future time, and if nothing were now there would be no present time ...

In commenting on St. Augustine's perplexity about time, Gale had this to say (1968: 4) :

Augustine's perplexity is due to the fact that we both have an experiential awareness of time and know the correct use of temporal language but are mysteriously reduced to silence when we try to verbalize this understanding.

He then went on to point out that the indefinability of 'time' is not simply verbal, as is the case with the indefinability of a color such as yellow (1968: 4-5):

The difference between 'time' and verbally indefinable words such as 'yellow' is that yellow, unlike time, can be pointed to, and therefore admits of a straightforward ostensive or demonstrative definition. Obviously, there is nothing we can point at and say, 'This is time.'

The difference between 'time' and 'yellow' seems to be simple: 'yellow' is a name that names some-*thing* whereas 'time' is a name that names no-*thing*. Or in other words, colors can be conceptualized in their own terms but time cannot. As in St Augustine's definition above, time is once again conceptualized and explained in terms of things in motion. The past consists of things that 'passed away'; the future consists of things that are 'coming'; and the present consists of things that exist 'now'. Clearly, what St. Augustine was asserting about time is but a metaphor of which the target domain is time and the source domain space.

It seems that time cannot be approached directly or literally, without getting onto the vehicle of a spatial metaphor. To further illustrate the point, let me shift to a different tradition in a different culture. Buddhism, for instance, holds the following view of time (from Keshavmurti 1991: 38):

Time is unintelligible. The past, the present and the future are relative, they are not self-existent. The past is that nature of an object which was produced and has been destroyed. The present is one which has been produced and still exists. The future one is that which has not yet come into being. Time exists only in relation to things. It cannot exist apart from them. Things are unreal, so time too is unreal. Time is a mere name, a mere convention, a phenomenal appearance.

In Buddhism, as can be seen, time is also defined in terms of objects or things coming into and going out of existence. Since time 'exists only in relation to things' and 'cannot exist apart from them', it seems to follow that it has to be understood in terms of objects/things existing in space.

The above definitions of time all lead to the same point, probably a trivial one, that while space and time are twin conceptions, they are not created equal and one has to be carried on top of the other. The relationship between space and time is well reflected in Samuel Alexander's metaphor that 'time is the mind of space and space is the body of time' (from Keshavmurti 1991: 36).

Indeed, for ages and across cultures, the models in which the conceptualization of time is cast have all been spatial in nature. The major models include time as linear, time as cyclic, and time as spiral (see, for instance, Akhundov 1986, Farmer 1990, Gould 1987, Keshavmurti 1991, Ray 1991). With the 'linear' model, time is one-dimensional, moving from the past through the present to the future, or vice versa, depending on different theories. With the 'cyclic' model, time is clearly two-dimensional, forming a 'closed loop' along which one can go 'forward to the past' (Ray 1991). As for the 'spiral' model, time has to occupy a three-dimensional

space while moving around and upward (or forward). These models apparently contradict each other, but they are all relevant in confirming the point that time is conceptualized in terms of space, even though time and space are mutually dependent in reality.

This asymmetrical relationship between the twin notions of space and time can be readily explained by the sequence of their development in human evolution in general, and in individual growth in particular. In the history of human evolution, the conceptions of spatial relations are developed far earlier than those of temporal relations. According to one proposal, 'Temporal relations do not begin to "organize" events in the human consciousness until the thirteenth century. Until then, time was to a significant degree perceived spatially' (from Akhundov 1986: 171, n. 32). In the process of individual growth, the conceptions of spatial relations are again acquired before those of temporal relations. As Akhundov puts it (1986: 21-22):

Although there are a great many ... temporal aspects in the life of the newborn, the child is late in acquiring a concept of time. This may be due to features of the evolutionary process, in which a sense of space precedes one of time. It can also be observed that, as the child attempts to conceptualize time, he or she actually operates with spatial relations for a considerable period.

With young children, time is connected with individual objects and movements. Even a seven- or eight-year-old child is still 'unable to perceive time as a relation independent of concrete changes. The child is willing to believe, for example, that the course of time can be influenced by moving the hands of a clock' (Akhundov 1986: 23). As a matter of fact,

‘an abstract concept of homogeneous and continuous time signifies a high degree of adaptation to change and does not occur until the threshold of adolescence, when formal operations develop in response to the demands of experience that time be distinguished from changes’ (Akhundov 1986: 23-24). Therefore, it is said, ‘The space is inherent in consciousness, but knowledge of time is something that man acquires’ (Keshavmurti 1991: 16).

The sequence of development of the conceptions of space and time in human evolution and acquisition has set its stamp on the history of language (see, e.g., Clark 1973, Traugott 1978). Thus, ‘it has been noted in language after language that notions of time are expressed by using expressions of space. This use of metaphorical language reflects our general understanding of time in terms of space’ (Radden 1992: 524). It seems that the TIME-AS-SPACE metaphor has a universal status. But the universal status of time conceptualized as space has not received adequate support in the form of systematically worked-out evidence across languages. To contribute to the establishment of its universal status, in this chapter I attempt such a study in Chinese.

3.2. Alverson’s Cross-Cultural/Linguistic Study

Alverson (1994), an anthropologist, has argued that the experience of time is based on a universal template of spatial experience--hence the spatialization of time in languages. He has studied ‘two universal linguistic processes’ (xii)--the collocation and metaphor--focusing on time expressions in four largely unrelated languages--English, Mandarin

Chinese, Hindi, and Sesotho. He pointed out that in the past, 'anthropology and other human sciences have overstated the variousness and diversity of temporal experience and, as a corollary, have little desire or means to explore and document temporal universals' (xii). He found that there exist 'five basic metaphorically characterized universal categories of temporal expression and experience' in all four languages: (1) 'Time is a partible entity', (2) 'Time is its effects', (3) 'Time is a medium in motion', (4) 'Time is a course', and (5) 'Time is its ascertainment/measurement'. He claimed to have discovered in time experience and expression 'a genuine necessary universal' (128), despite all the cultural particulars: 'the undeniable diversity in the experience and expression of time is situated in, and must be understood in terms of, a framework of experiential and linguistic universals' (xi-xii). The implication that Alverson has derived from his study is this:

While there is no doubt that differences do exist among cultures, these differences seem circumscribed and based on universally shared, everyday experience. Further, if experience as 'subjective' as that of #time#¹ can exhibit such commonality and hence intersubjectivity across distinct and unrelated (or remotely related) languages and markedly different cultures, it seems highly likely we humans share other notions, concepts, and experiences that arise from embodied, enculturated cognition. (130)

Alverson, however, has found some difference among the four languages in their spatial conceptualization of time. Here and now, in keeping with my purpose, I will first cite what he has found as space-time deixis in English and (Mandarin) Chinese as follows, coming back to his findings about Hindi and Sesotho later.

- (1) English (from Alverson 1994: 69)
 - a. Events that are before me I will come to.
 - b. Events that have already happened are behind me.
 - c. Events that come/arrive later will follow me.
 - d. Events that are later I will come to.
 - e. Events that happened before, happened earlier, are behind me/I leave behind.
 - f. What lies before/has yet to happen/is later/has yet to come to us, we face.
- (2) Chinese (from Alverson 1994: 75)
 - a. Events that have already happened are those that are before or have passed the experiencer/speaker.
 - b. Of the events that are before--that is, have already passed the experiencer/speaker--those that were experienced earlier are before/in front of those that were experienced later/after.
 - c. Events that have not yet happened to the experiencer are those that will come or are yet to come.
 - d. Events that will come or are yet to come are all later or after/behind the experiencer.

In particular, Alverson has discovered that in Mandarin Chinese, 'the time-as-course and space-time deixis shows an interesting contrast with English which is worth examining' (104). He describes the contrast as follows (104-5):

Mandarin collocations of space-time deixis express an experiential perspective in which time is a medium in motion-bearing events (like English), but unlike English, the experiencer is always stationary in the medium, facing the direction of the past--that is, that which has passed--with his or her back to the future. The past is before one; the future is/comes from behind. Though infrequent, this 'back-to-the-future' temporal orientation is not unique to Chinese. It is found in Latin (see Bettini 1991 for a thorough analysis) and in certain native languages of Latin America--for example, the Mayan language, Quiche.

The endless course of time flows from behind the speaker, passing him or her, moving forever before/in front of the speaker

into the past. The future, coming from behind the experiencer, moves closer and closer to him or her and the present. Once the time medium cum events have passed by the experiencer, they become past events and are before or in front of the experiencer. Events have, like the experiencer, a front (further past) back/behind (more recent past/future) orientation. Note that in English events moving in time or the moving of the medium of time itself ceases after they 'pass' the speaker. The past remains stationary, and the speaker moves, leaving it behind. In Mandarin, events that are before or have passed the experiencer themselves continue to move further and further away from the experiencer, who remains 'now' but still in the ordinal sequence.

...
English space-time deixis, although similar to that in Mandarin, shows some specific points of contrast. Our English deictic collocations exhibit an interesting paradigmatic pattern. First, there are two metaphors of time in English deixis: (1) time is a relatively still course in which events move, and (2) time is a medium in motion bearing events along with it. Second, there are two attitudes taken by the speaker: (1) the speaker is stationary facing the future, or (2) the speaker is moving toward the future.

This paradigmatic pattern in English is illustrated by the following table (from Alverson 1994: 107):

Table 3.1. Paradigmatic pattern of the space-time deixis in English

		Metaphor of Time	
		Time a Still Course	Time a Medium in Motion
Speaker's Attitude	Stationary, Facing Future	(a)	(b)
	Moving toward Future	(c)	(d)

According to Alverson, perspective (a), represented by cell (a), presumes time is a course in which events move temporally, toward a stationary experiencer, who 'stands' in and faces the direction in the course from which events are coming. The examples he gave are (106):

- (3) a. Christmas is coming.
- b. Who knows what the day will bring.
- c. Tomorrow comes after today.
- d. The past is behind us.

In perspective (b), represented by cell (b), time is itself a medium in motion bearing a schedule or sequence of events with it toward the experiencer, who faces the 'flow' of time. The examples given are:

- (4) a. Time is coming when ...
- b. The future is upon us.
- c. Time marches on.
- d. They have gone before us.

In perspective (c), i.e. cell (c), the speaker/experiencer moves along a course in which events are temporally situated. One faces, goes into the future, and leaves the past behind. According to Alverson, only in perspective (c) 'can the past undergo relative temporal movement--by virtue of the experiencer's movement on into the future and away from the past' (107). Thus, there exists the following contrast:

- (5) a. I'm leaving my childhood farther and farther behind.
- b. * My childhood is getting farther and farther behind (me).
- c. In my mind's eye/memory/consciousness, my past is receding.

Perspective (d), says Alverson, seems to be a null set in English. Thus one cannot say collocaitonally, 'The future and I are headed toward each other.'²

At this point, I want mention that my own study in Chinese does support Alverson's general claim for a universal, panhuman tendency to think and talk about time in terms of space. However, my study contradicts Alverson' specific conclusion that in Chinese the speaker/experiencer is always stationary, facing the past and with the future behind. But before I present my own study in Chinese, I first review Lakoff's studies in English.

3.3. Lakoff's Studies in English

Lakoff (1990, 1993a, 1994) has also noticed that time in English is conceptualized in terms of space. But his findings differ, to some extent, from Alverson's (1994) described above. According to Lakoff (1993a: 216-17), the general conceptual metaphor of time in English is as follows, with a detailed pattern of inferences:

(6) The General Metaphor: TIME PASSING IS MOTION.

Ontology:

Time is understood in terms of things (that is, entities and locations) and motion.

Background condition:

The present time is at the same location as a canonical observer.

Mapping:

Times are things.

The passing of time is motion.

Future times are in front of the observer; past times are behind the observer.

One thing is moving, the other is stationary; the stationary entity is the deictic center.

Entailment:

Since motion is continuous and one-dimensional, the passage of time is continuous and one-dimensional.

This central metaphor covers two special cases, as Lakoff specified (1993a: 217-18):

(7) Special Case 1: TIME PASSING IS MOTION OF AN OBJECT.

The observer is fixed; times are entities moving with respect to the observer.

Times are oriented with their fronts in their direction of motion.

Entailments:

If time 2 follows time 1, then time 2 is in the future relative to time 1.

The time passing the observer is the present time.

Time has a velocity relative to the observer.

(8) Special Case 2: TIME PASSING IS MOTION OVER A LANDSCAPE.

Times are fixed locations; the observer is moving with respect to time.

Entailments:

Time has extension, and can be measured.

An extended time, like a spatial area, may be conceived of as a bounded region.

These two special cases cover a wide range of data in English, as given in (9) and (10) respectively (Lakoff 1993a: 217-18):

- (9) a. The time will come when ...
- b. The time has long since gone when ...
- c. The time for action has arrived.
- d. That time is here.
- e. In the weeks following next Tuesday ...
- f. On the preceding day ...
- g. I'm looking ahead to Christmas.

- h. Thanksgiving is coming up on us.
 - i. Let's put all that behind us.
 - j. I can't face the future.
 - k. Time is flying by.
 - l. The time has passed when ...
- (10)
- a. There's going to be trouble down the road.
 - b. His stay in Russia extended over many years.
 - c. He passed the time happily.
 - d. We're coming up on Christmas.
 - e. We're getting close to Christmas.
 - f. He'll have his degree within two years.
 - g. I'll be there in a minute.

All these examples are instances of mappings from the space domain onto the time domain under the central conceptual metaphor in (6). They show how abstract inferences of time are actually metaphorical versions of spatial inferences, which can be summarized by a single conceptual metaphor.

It is apparent that Lakoff's two special cases are equivalent to Alverson's (1994) perspectives (b) and (c). In perspective (b), the speaker is stationary facing the future whereas the time is a medium in motion. In perspective (c), conversely, the speaker is moving toward the future while the time is a still course. Lakoff's paradigm lacks Alverson's perspective (a), in which both the speaker and the time are motionless while events are moving toward the speaker in time as a still course. In Lakoff's paradigm, whenever events are moving, they are carried by and in the time as a medium in motion. Therefore, perspective (a) is not independently needed.

3.4. Time as Space in Chinese

In this section, I make a thorough analysis of data from Chinese to demonstrate that the expressions of time in Chinese, which form a very rich and intricate system, largely fall into the patterns outlined by Lakoff for English. It is shown that the contrast between English and Chinese suggested by Alverson (1994) does not exist. According to that contrast, the speaker/experiencer in Chinese is always stationary facing the past, while in English the speaker/experiencer always faces the future, either stationary or moving. Instead, it is shown that the two special cases proposed by Lakoff (1990, 1993a, 1994) for English better account for the spatialization of time in Chinese.

3.4.1. Evidence in the Lexicon

In Chinese, the lexical items in the time domain are systematically structured via metaphorical transfer from the space domain. This can be seen from the Chinese words for ‘past’, ‘present’, and ‘future’.

3.4.1.1. The Past, the Present, and the Future

For the past, the two conceptual mappings are given in (11). They represent the two special cases respectively.

- (11) a. Case 1: The past is the time that has passed or gone by the stationary Observer.³
- b. Case 2: The past is the time that has been left behind by the moving Observer.

These two cases are demonstrated by the words for ‘past’ given in (12) and (13) below. In the parentheses are word-for-word translations.

- (12) a. guo-qu (passed/gone by) ‘past’⁴

- b. yi-wang ([have] already-gone) 'past'⁵
 - c. yi-wang (PRT-gone) 'past'⁶
- (13) a. li-cheng (traveled through/undergone-journey) 'past; course in the past'
- b. qian-chen (previous/behind-dust/trace) 'past'⁷

The five words in (12) and (13) all mean 'past', but they belong separately to the two different cases, as specified by Lakoff (1990, 1993a, 1994). The three words in (12) are Case-1 examples: they conceptualize the past as something that has passed by a stationary Observer. On the other hand, the two words in (13) conceptualize the past as either the road already covered by the traveling Observer as in (13a), or as the trace left behind by him as in (13b). It is noteworthy that, while all five words here denote 'past', they still differ somewhat in usage: the three in (12) refer to the past more from a neutral point of view; the two in (13) refer to the past in terms of the experience of a subject (a person or a group of people). This difference is consistent with the difference between Case 1 and Case 2.

As just mentioned, (12a-c) particularly refer to the past in time. In these three words, however, both *qu* and *wang* primarily mean 'go', as antonyms of *lai* 'come', as shown in the following examples:

- (14) a. Nimen lai qu ziyou.
 you come go free
 'You are free to come and go.'
- b. Jie shang lai wang de ren hen duo.⁸
 street on come go MOD people very many
 'There are many people coming and going on the streets.'

In a more abstractly-extended sense, *lai-qu* 'come-go', *lai-wang* 'come-go', and *wang-lai* 'go-come' mean 'contact' or 'dealings', as shown in the following examples:

- (15) a. Wo gen ta zhijian mei shenme lai-qu.
 I and he between no whatever come-go
 'I don't have whatever dealings with him.'
- b. Wo he ta jingchang lai-wang.
 I and he often come-go
 'I have frequent contacts with him.'
- c. Tamen liang wang-lai miqie.
 they two go-come close
 'The two of them are in close contact.'

Note that in both (14) and (15) *lai-qu* 'come-go', *lai-wang* 'come-go', and *wang-lai* 'go-come' have a spatial sense whether or not they are basic or more abstractly extended. In the abstractly-extended sense, even though the people involved do not 'come' and 'go' physically to see each other and, for instance, they contact each other through telephone or mail, the spatial distance between them is still crossed over by words or letters that travel between them.

What is interesting here is that these words with spatial senses are systematically used in the time domain to indicate the passage of time. Both *qu* 'go' and *wang* 'go' indicate the time in the past, although they are assigned different tasks. (16) below contains some temporal words or expressions including *qu* 'go':

- (16) a. qu-nian (gone-year) 'last year'
 b. qu-sui (gone-age) 'last year'
 c. qu-qiu (gone-autumn/fall) 'last autumn/fall'

- d. qu-dong (gone-winter) 'last winter'
- e. qu-ri (gone-day) 'bygone days; days in the past'

As is shown, *qu* 'go' is usually used to refer to 'last year' or 'a particular season of last year' as in (16a-d), while (16e) is an exception where *qu* refers to past times in general.

On the other hand, *wang* 'go' is usually used to refer to past times in general, as can be seen from the following examples.⁹

- (17) a. wang-nian (gone-year) 'former years'
- b. wang-ri (gone-day) 'former days; bygone days'
- c. wang-shi² (gone-time) 'past times; the past'
- d. wang-shi⁴ (gone-things/events) 'past events; the past'
- e. wang-gu (gone-ancient time) 'the ancient time'
- f. wang-chang (gone-often) 'habitually in the past'

The words in (16) and (17) illustrate that past times are conceptualized as moving entities or things which have gone by. This is exactly what Lakoff (1990, 1993a, 1994) specified as Case 1 for English. A difference between English and Chinese, however, is that the spatial conceptualization of time may be more directly reflected in the lexicon in Chinese than in English. This difference is exemplified in (12-13) and (16-17). Especially, *qu* 'go' and *wang* 'go' are polysemous, i.e. they are used with different but related meanings, their basic sense being in the space domain, and the metaphorically extended sense in the time domain. The English word *go* is also used polysemously in a similar sense, such as in 'The person went by quickly' vs. 'The year went by quickly'. It is also used to form a compound word such as *bygone* in 'in bygone days' or 'Let bygones be bygones'. But

it is not used in such a way to the same extent as its Chinese counterparts *qu* and *wang*, as illustrated in (12-13) and (16-17).

According to Lakoff (1990, 1993a, 1994), the present time is at the same location as the Observer, no matter whether it is Case 1 where times move toward and pass the stationary Observer, or Case 2 where the Observer moves through times as bounded spaces. In either case, the present time is at the point where the Observer is. Therefore, there is only one conceptual mapping here:

- (18) Case 1 and Case 2: The present is the time at the same location where the Observer is.

This, again, is reflected in the Chinese words for ‘present’, which are considerable in number. Given below are some of them.

- (19) a. xian-zai (present/existing/on hand-existing/on going) ‘now; at present’
 b. xian-shi (present/existing/on hand-time) ‘now; at present’
 c. dang-qian (just at-front) ‘at present; now’
 d. mu-qian (eye-front) ‘at present, at the moment’
 e. mu-xia (eye-below) ‘now; at present; at the moment’
 f. yan-xia (eye-below) ‘at the moment; at present; now’
 g. yan-qian (eye-front) ‘at the moment; at present; now’
 h. yan-dixia (eye-underneath) ‘at the moment’
 i. yan-mian-qian (eye-face-front) ‘at the moment; at present; now’
 j. jiao-xia (foot-under) ‘at present; now’

In (19a, b), the present time is conceptualized as co-present or co-existing with the Observer. In Chinese, the words for *cash* are *xian-qian/jing* ‘present/existing/on hand-money’. It is the money on hand, or the money with the possessor. Similarly, the present time, as in (19b), is the time on

hand, or the time with the Observer. In (19c), the present time is conceptualized as what is ‘just in the front (of the Observer)’. Here, a spatial term *qian* ‘front’ is used to refer to time. In fact, in all the examples of (19d-j), a spatial term is used in combination with a body-part noun to refer to the present time. Respectively, the present time is ‘right in front of or below one’s eyes’ in (19d-h); ‘right in front of one’s eyes and face’ in (19i); and ‘right under one’s feet’ in (19j). In all these cases, the present time is conceptualized metaphorically as at the place where the Observer is. It needs to be noted that, while the present is also ‘in front of’ the Observer, just as the future, it is distinct from the future in that it has to be very close to the Observer. Thus, it is ‘right below the Observer’s eyes’, or ‘right before the Observer’s face’, or ‘right under the Observer’s feet’. Another interesting thing is that the present is usually conceptualized as ‘right in front of the Observer’ but not ‘alongside of the Observer’. This may be related to the sense of vision: the present is where one can *see* without even turning one’s head sideways.

It is worth noting that, while (19a-f) are nowadays used solely in a temporal sense, (19g-j) are used in both space and time domains, with the spatial sense as the basic and the temporal sense as metaphorically extended or mapped. For example:

- (20) a. Yan-qian shi yi-pian bi-lü de dao-tian.
 eye-front be a-stretch green MOD paddy-field
 ‘Before our eyes is a stretch of green paddy fields.’
- b. Bu neng zhi gu yan-qian, bu guan jianglai.
 not can only think eye-front not care future
 ‘One must not only think of the present and neglect the future.’

- (21) a. Ta hen jin-shi, yan-dixia de dongxi
 he very near-sighted eye-underneath MOD things
 cai kan de qing.
 only see COM clear
 'He is very near-sighted and only can see clearly things right
 before his eyes.'
- b. Yihou de shi yihou zai zuo,
 after MOD thing afterwards then do
yan-dixia de shi yaojin.
 eye-underneath MOD thing urgent
 'After things can be handled afterwards, and things at the
 moment (on hand) are urgent.'
- (22) a. Jiao-xia shi yi pian bi-lü de caodi.
 foot-under be a stretch green MOD meadow
 'Under our feet is a stretch of green meadow.'
- b. Jiao-xia shi nong mang jijie.
 foot-under be farming busy season
 'Now it is the busy season in farming.'

The temporal sense 'at present/the present moment' of *jiao-xia* in (22b) is labeled as 'dialectal' in the dictionary (Wei 1995). It can be assumed that it is used especially by peasants, who cultivate the land under their feet for a living.

From all the examples above we can see that it is indeed the case that in Chinese the present time is conceptualized spatially as at the location where the Observer is. In most of the cases, the metaphorical mapping from the space domain onto the time domain is realized through a combination of spatial terms and body-part nouns.¹⁰

In Chinese, the future is structured in a parallel but opposite way from the past in the Chinese lexicon. The two conceptual mappings representing the two special cases are:

- (23) a. Case 1: The future is the time that is moving toward the stationary Observer.
 b. Case 2: The future is the time that is lying ahead of the moving Observer.

Consistent with these two conceptual metaphors are the following words for 'future' in Chinese:

- (24) a. jiang-lai (will-come) 'future'
 b. wei-lai (haven't [yet]-come) 'future'
- (25) a. qian-cheng (front/ahead-journey) 'future; prospect'
 b. qian-tu (front/ahead-road) 'future; prospect'
 c. qian-jing (front/ahead-scene/view) 'future; prospect; vista'

Here, (24) contains Case-1 examples where the future times are conceptualized as entities that 'have not yet but will come' towards the stationary Observer, and (25) belongs to Case 2, where the future times are 'journey, road, or scene in front or ahead' of the traveling Observer. The difference between (24) and (25) in usage is parallel to that between (12) and (13) denoting the past: the two examples in (24) refer more to the future in time while the three in (25) refer more to the future of a person or a group of people.

As mentioned earlier, in Chinese *lai* 'come' is the antonym of *qu* 'go' and *wang* 'go'. While *qu* and *wang* are used to refer to the past as in (12a, b) and (16, 17), *lai* is used to refer to the future as in (24a, b). There are

still a number of other words in which *lai* is used to refer to a period of time in the future. For instance,

- (26) a. lai-ri (coming-day) 'days to come; future'
 b. lai-zhao (coming-morning) 'tomorrow; next day'
 c. lai-nian (coming-year) 'the coming year; next year'
 d. lai-sui (coming-year) 'the coming year; next year'

In these words, the times in the future are said to be the times that are 'coming' toward the Observer.

So far I have discussed the Chinese words for 'past', 'present', and 'future'. It is shown that the words discussed are originally spatial terms, mapped onto the temporal domain via metaphor. Some of them are polysemies, with spatial sense as primary, and temporal sense as secondary. Some others have completely transferred from the space domain to the time domain, having dropped the original spatial sense and retaining the temporal one only.

As is shown, the distribution of the Chinese words for 'past', 'present', and 'future' is structured in a way that is consistent with the two special cases specified by Lakoff (1990, 1993a, 1994) for English. In Case 1, the future times are moving toward the stationary Observer. The time which is passing by the Observer is the present. Once it has passed by the Observer, it joins the previous times to become the past. In Case 2, the Observer is traveling through the 'space' of time which is measurable. The future times are ahead of the moving Observer. The present time is where the Observer is. The past times are those left behind by the Observer. In either case, the future is in front of the Observer while the past is behind

him. This is further illustrated by the independent evidence in the verbs in collocation with ‘past’ and ‘future’, to which I now turn.

3.4.1.2. *The Verbs in Collocation with ‘Past’ and ‘Future’*

The fact that the future is conceptualized as in front of the Observer and the past behind the Observer is actually self-evident in Case 2 exemplified above. In Case 2, the future is the ‘journey’, the ‘road’, or the ‘scene’ ahead of a traveler, and the past is the ‘journey’ accomplished or the ‘trace’ left behind by the Observer, a traveler in this case. It is therefore clear that the traveler is facing the future, with the past behind his back, assuming that the canonical manner for humans to walk is walk forward. However, this is not so clear with Case 1, where the future is conceptualized as something coming toward the Observer and the past something going away from the Observer. But the direction of the motion is unspecified. Can it be, for instance, that future times are coming toward the stationary Observer from behind, passing him, and going further and further away in front of him? This is what Alverson (1994) proposed as the sole conceptualization of time in Chinese. I mentioned earlier that Alverson’s proposal was wrong. Instead, I claim that in Chinese the Observer *always* faces the future and has the past behind him, in exactly the same way as the Observer in English. This claim entails that even in Case 1 the Observer is facing the future rather than the past. Is there any independent evidence available to prove that my claim is correct? Or, is it possible to prove that in the following Figure 3.1 is not a correct case for Chinese while Figure 3.2 is? The answer is ‘Yes’.

Figure 3.1. The back-to-the-future orientation

Figure 3.2. The front-to-the-future orientation

In Case 1, as just mentioned, it is not self-evident with the nouns of 'future' or 'past' themselves that Figure 3.1 is not the case but Figure 3.2 is. For instance, *jiang-lai* 'will-come' and *wei-lai* 'haven't (yet)-come', the words for 'future', do not specify the direction of motion. Neither does *guo-qu* 'passed/gone by' or *yi-wang* '(have) already-gone', the words for 'past'. Besides, as a verb, the word *guo-qu* can be interpreted very differently as in these two exactly the same sentences: (a) *Ta gang guo-qu* 'He just went (over) there'; and (b) *Ta gang guo-qu* 'He just went by/past'. In either case, directionality is not specified. So they both are open to the

interpretation as represented by Figure 3.1. In the same vein, the Chinese verb *lai*, which means ‘come (toward the speaker)’ does not specify the direction from which something or somebody is moving toward the speaker. It can be coming toward the face (Figure 3.2) or the back (Figure 3.1) of the speaker. How do we know that Case 1 in Chinese is exactly the same as Case 1 in English, namely, the future time is coming in the face of the Observer (Figure 3.2) rather than from behind (Figure 3.1)? Nevertheless, the fact that Figure 3.2 presents a correct case is evident from the verbs used with the time words of ‘future’ and ‘past’. In Chinese, the verbs that are used exclusively with the words of ‘future’ are:

- (27) a. zhan³-wang (spread out/unfold-gaze into the distance/look over) ‘look into the distance; look into the future; look far ahead’
 b. zhan¹-wang (look forward-gaze into the distance/look over) ‘look forward; look far ahead’
 c. zhan¹-nian (look forward-think of) ‘look ahead and think of (the future)’

These verbs collocate only with the words of ‘future’ in (24) and (25) above. In the following, for instance, are some of the common collocations:

- (28) a. zhan³-wang qian-cheng
 look-far-ahead front-journey
 ‘look forward to the future; look into the future’
 b. zhan¹-wang wei-lai
 look-far-ahead haven’t (yet)-come
 ‘look forward to the future’
 c. zhan¹-nian qian-tu
 look ahead-think of front-road
 ‘think of the future’

Note that both (28a) and (28b) have their counterpart spatial sense, meaning ‘gaze/look into the distance’. For example,

- (29) a. Ta pa shang shan-ding, zhan³-wang yuan-fang.
 he climb up mountain-top look-ahead far-side
 ‘He climbed to the top of the mountain, and gazed into the distance.’
- b. Ta tai-tou zhan¹-wang, kanjian yuan-fang
 he raise-head look-far-ahead see far-side
 you yizuo baota.
 have a pagoda
 ‘Raising his head, he looked ahead and saw a pagoda in the distance.’

The spatial senses of the words, as in (29a, b), are primary while the temporal uses of the words, as in (28a, b), are results of metaphorical mapping from the spatial domain.

The verbs used exclusively with the words of ‘past’ are numerous. A common characteristic of these is that they all contain a morpheme, or word when used separately, *hui* meaning ‘to turn around’ or ‘to turn back’ in this case, as in (30) below.

- (30) a. hui-gu (turn around-look back) ‘look back; review’
 b. hui-shou (turn around-head) ‘look back; recollect’
 c. hui-mou (turn around-eye) ‘look back; recollect; recall’
 d. hui-su (turn around-trace back) ‘recall; look back upon’
 e. hui-yi (turn around-recall/recollect) ‘call to mind; recollect; recall’
 f. hui-xiang (turn around-think) ‘think back; recollect; recall’
 g. hui-nian (turn around-think of/miss) ‘think back; recollect; recall’
 h. hui-si (turn around-think of/long for) ‘think back; recollect; recall’

Note that the Chinese morpheme *hui* in the above examples is comparable to the English morpheme *re-*, meaning ‘back’ or ‘again’, which has a basic spatial sense too. It is now obvious why the past is always behind us: whenever we want to review, recall, or recollect the past, we have to ‘turn around’ first. However, to review, recall, or recollect the past sometimes requires more than just ‘turning around’, as is illustrated by the related verbs in (31) used also with the words of ‘past’ only:

- (31) a. zhui-nian (chase/run after/pursue-think of) ‘recall; reminisce’
 b. zhui-si (chase/run after/pursue-think of/long for) ‘recall; recollect’
 c. zhui-xiang (chase/run after/pursue-think) ‘recall; reminisce’
 d. zhui-yi (chase/run after/pursue-recall/recollect) ‘recall; recollect; look back’
 e. zhui-hui (chase/run after/pursue-repent/regret) ‘repent; regret’

From these examples we can see that sometimes, in order to recall, recollect, reminisce, or regret the past, one has to not only ‘turn around’ but also ‘run after’ it.

There exists an important difference between (30) and (31). (30) fits in with both Case 1 and Case 2. In Case 1, the past is a moving object that has passed by the Observer; in Case 2, the past is either the road covered by the traveling Observer or the trace left behind by him. In both cases, the Observer ‘turns around’ to ‘see’ the past. In contrast, (31) fits only into the Case-1 situation. The inference pattern is as follows. The past times are moving objects having passed by the Observer. In order to ‘reach’ a particular past time, the Observer does not only have to ‘turn around’, but also to ‘chase or run after’ it. The logical inference is that the longer that

past time has passed by the Observer, the harder it is for the Observer to 'catch up with it'. When the 'distance' between the past time under consideration and the Observer becomes so great, it is likely that the Observer will chase or run after it in vain. And the ability to catch up with the past varies across individuals. This is because some people have better memories than others, just as some have greater physical strength than others.

Another point worthy of note here is that the words in (30a-c) again have a primary physical sense just like those in (27) above collocating with the words for 'future':

- (32) a. *hui-gu* 'turn around and see'
 b. *hui-shou* 'turn around one's head'
 c. *hui-mou* '(especially female) turn around one's head and look'

It is from the physical domain that these words are mapped onto the more abstract domain.

In Chinese, the word *gu* 'turn around and look at' is the antonym of *zhan*¹ 'look forward/ahead' as in (27b). They can, for instance, form the following compound and set phrase used in both a physical and an abstract sense:

- (33) *zhan-gu*
 a. 'look ahead and behind'
 b. 'think over and over again; consider carefully; turn something over in one's mind'

- (34) *zhan-qian-gu-hou* (look forward-front-look behind-back)
 a. 'look ahead and behind'

- b. 'be careful and cautious before doing something; be overcautious and indecisive'

Here (33a) and (34a) denote literal bodily activities while in (33b) and (34b) the primary physical senses have worked their way up into an abstraction to denote mental activities.

Although the words in (30d-h) and (31) do not have a primary counterpart sense in the physical domain, their first morpheme, *hui* 'turn around' or *zhui* 'chase/run after/pursue', clearly shows that their abstract senses are derived from the concrete, physical world. Here, the primary physical senses have worked their way up into abstraction to denote mental activities. It shows that the abstract senses are derived from the concrete, physical world, and that abstraction here is based on bodily experience (see Johnson 1987, Lakoff 1987a, Sweetser 1987, 1990, Turner 1991, etc.).

As a matter of fact, all the examples in this section provide typical instances of the more general MIND-AS-BODY metaphor where mental activities are conceptualized metaphorically as bodily activities (see Sweetser 1990, Johnson 1992, etc.). The analysis here strongly supports Lakoff and Johnson's (e.g. Lakoff 1987a, Johnson 1987, 1991, 1992, etc.) claim for a bodily basis of abstraction: abstract reasoning in this case *is* embodied.

3.4.1.3. *Seemingly Contradictory Cases*

Among the spatial terms used to express time in Chinese, there are some seemingly contradictory cases, that is, a certain term is used in the expressions of both 'future' and 'past'. In section 3.3.1.1, for instance, I

demonstrated that *lai* ‘come’, as the antonym of *qu* ‘go’ and *wang* ‘go’, appears in the expressions of ‘future’, such as follows:

- (35) a. jiang-lai (will-come) ‘future’
 b. wei-lai (haven’t [yet]-come) ‘future’
 c. lai-ri (coming-day) ‘days to come; future’
 d. lai-nian (coming-year) ‘the coming year; next year’

In (36) below, however, *lai* ‘come’ occurs in the expressions of ‘past’.

- (36) a. yi-jiu-wu-yi nian yi lai
 1951 year PRT come
 ‘since 1951’
 b. wu-shi niandai yi lai
 50’s decade PRT come
 ‘since 50’s’
 c. wu-shi-wu nian lai
 55 year come
 ‘in the past/last fifty-five years’

Each example represents a temporal span from the past to the present. For (36a) it starts at a particular point of time (1951) and ends at ‘now’; for (36b) it starts at a particular period of time (50’s) and ends at ‘now’; for (36c) it starts a period of time (55 years) ‘ago’ and ends at ‘now’.

(35) and (36) seem to present contradictory uses of *lai* ‘come’, to express both ‘future’ and ‘past’. This seeming contradiction actually does not exist, considering the two special cases specified by Lakoff (1990, 1993a, 1994). (35) belongs to Case 1, where the future times are coming toward the stationary Observer, while (36) belongs to Case 2, where the moving Observer has come all the way from the past to the present. In

other words, the agent of the action of 'coming' is the moving time in (35), and it is the traveling Observer in (36).¹¹ The difference in the two cases involved accounts for the apparent contradiction in the uses of *lai* 'come'. It can be illustrated by Figure 3.3 and Figure 3.4 respectively.

Figure 3.3. Case 1: time as moving object

Figure 3.4. Case 2: time as stationary landscape

Figure 3.3 represents Case 1 where time is moving with its front toward the stationary Observer. So it is time that is COMING to the Observer. Figure 3.4, on the other hand, represents Case 2 where time is stationary landscape while the traveling Observer is moving over it. Therefore, it is

the Observer that has COME all the way from the past to the present where he is. (37) below makes a further illustration of how the two cases give rise to two different ways of presenting the same idea:

- (37) a. guoqu shi-wu nian li
 gone-by fifteen year in
 'in the past fifteen years'
- b. shi-wu nian lai
 fifteen year come
 'in the last fifteen years'

In (37a) it is the fifteen years as the moving entities that have just gone by the Observer; in (37b) it is the Observer that has just come through the fifteen years as bounded spaces. Despite different ways of conceptualization, they mean essentially the same thing. In other words, they represent different cognitive construals of the same thing.

Another example is the spatial term *qian* 'front/ahead/before', which is opposite to *hou* 'back/behind/after'. I will start with a simple lexical example (from Wang 1992: 1290):

- (38) *qian-lu* (front/ahead/before-road) 'past or future'

How can this lexical item mean both 'past' and 'future' at the same time? What is the logic here? The key to interpretation or conceptualization is the point of reference. When it means 'future', *qian-lu* is 'the road in front of, ahead of, or before the Observer, which he is going to travel through'. The point of reference is the traveling Observer in spatial terms. The word *qian-lu* in this case simply means 'the road ahead (of the traveling Observer), and therefore 'future'. The same conceptualization is applied to

qian-cheng, *qian-tu*, and *qian-jing* in (25) above, which all mean ‘future’. When *qian-lu* means ‘past’, the point of reference is the time ‘now’, i.e. the point where the traveling Observer is, and also the point that separates the past from the future. In this case, *qian-lu* means ‘the road (covered) before the point “now”’, and therefore ‘past’.

It is worth noting that in Chinese the word *hou-lu* (back/behind/after-road) is not the antonym of *qian-lu* (front/ahead/before-road). That is, it cannot mean either ‘past’ or ‘future’. Instead, it means ‘route of retreat’ or ‘a way of escape’. This asymmetry is comparable to that of **beforenoon* (but *forenoon*) and *afternoon* in English. However, *before noon* and *after noon* are both acceptable in English, so are *yi-qian-de-lu* (PRT-front-MOD-road) ‘past’ and *yi-hou-de-lu* (PRT-back-MOD-road) ‘future’ in Chinese. That is, the symmetry is established at the phrasal level in both languages.

As has been seen, the apparently contradictory uses of certain spatial terms in fact result from a parametric difference in the selection of point of reference: the time vs. the Observer. This difference parallels the difference between Case 1 and Case 2.

3.4.1.4. *Spatial Terms Used in the Domain of Time*

In this section, I will cite some more examples to show how spatial terms are used in the domain of time. The uses are so conventional that they are not seen as metaphorical by native speakers of the language. The words involved are polysemous, but the spatial sense is primary and the temporal one secondary, as is evidenced in the dictionaries, in which the

order of various senses of a given word is such that the primary sense is listed before the derived or extended ones.

These words usually exist in pair of antonyms. They are called 'localizers' in Chinese grammars (see Chao 1968, Li & Thompson 1981), a term which in itself suggests that they are primarily spatial. Given below in (39) and (40) is such a pair (based on Wu 1981):

(39) qian

- a. front; forward; ahead
 - i) lou qian
building front
'in front of the building'
 - ii) qian pai
front row
'the front row(s)'
 - iii) yong wang zhi qian
brave go straight forward
'go bravely forward/ahead'
- b. ago; before
 - i) ji tian qian
a-few days ago
'a few days ago; a few days before'
 - ii) wanfan qian
supper before
'before the supper'

(40) hou

- a. behind; back; rear
 - i) wu hou
house behind
'behind/at the back of the house'
 - ii) hou pai
back row
'the back row(s)'

- iii) hou tui
 back retreat
 ‘draw back; retreat’
- b. after; afterwards; later
 - i) ji tian hou
 a-few days later
 ‘after a few days; a few days later’
 - ii) wanfan hou
 supper after
 ‘after the supper’

In general, *qian* and *hou* are used symmetrically to denote the time ‘before’ and ‘after’ a point or a period of time at present, or in the past, or in the future. When they are used together, they mean ‘before and after (of a time)’, as in the following example:

- (41) Shengdan jie qian-hou
 Christmas holiday front/back/after
 ‘around Christmas Day’

However, they are usually used separately as a morpheme in another word. The following pairs of examples are some of the commonly-used antonyms in the temporal domain which contain them:

- (42) a. yi-qian (PRT-front) ‘before; formerly; previously’
 b. yi-hou (PRT-back) ‘after; afterwards; later; hereafter’
- (43) a. cong-qian (from-front) ‘before; formerly; in the past’
 b. wang-hou (toward-back) ‘from now on; later on; in the future’
- (44) a. qian-tian (front-day) ‘the day before yesterday’
 b. hou-tian (back-day) ‘the day after tomorrow’
- (45) a. qian-nian (front-year) ‘the year before last’
 b. hou-nian (back-year) ‘the year after next’

In (42) the dividing point is the middle-present which divides the front-past and the back-future, or it can be any point in time that divides the front-earlier and the back-later. (43) is more of a Case-2 example: the Observer has reached the middle-present *from* the front-past, and will go *toward* the back-future. Here, time is conceptualized as a bounded space, say, a house with its front facing you. You have entered its front door and you are going to exit its back door. Thus, there are mappings of front-past, middle-present, and back-future. The sense of motion (of the Observer) results from the use of the prepositions *cong* ‘from’ and *wang* ‘toward’. In (44) and (45) the mappings work in a similar fashion.

In the following pair, however, *qian* and *hou* are not used symmetrically, though they still denote a time in the past and in the future respectively.

- (46) a. ri-qian (day-front) ‘a few days ago; the other day’
 b. ri-hou (day-back) ‘in the future; in the days to come’

Here the dividing point is the ‘day’, i.e. the present where the Observer is, with the ‘front’ indicating a past time in (46a) and the ‘back’ indicating the future times in (46b).

At this point, I would like to go back to Alverson 1994, where it is claimed that in Mandarin Chinese the experiencer/speaker (i.e. the Observer in our terms) is always stationary, facing the past, with the future coming from behind. This claim, it seems, is at least partially based on a wrong interpretation of the reference point regarding the pair of spatial terms *yi-qian* and *yi-hou* as in (42) above. Therefore, in Chinese,

according to Alverson, ‘Events that have already happened are those that are before (*yiqian*) ...the experiencer/speaker’, and ‘Events that will come or are yet to come are all later or after/behind (*yihou*) the experiencer’ (75). The interpretation is wrong because for the contrast between *yiqian* and *yi-hou* the reference point is always a point of time regardless of where the experiencer/speaker is. The uses of these two words in Chinese can be illustrated by the following figure.

Figure 3.5. Distribution of *yi-qian* and *yi-hou* in Chinese

yi-qian (before)		yi-hou (after)	yi-qian (before)		yi-hou (after)	yi-qian (before)		yi-hou (after)
<hr/>								
A			B			C		
Halloween			Thanksgiving			Christmas		
past			present			future		
			Observer					

Here point B (Thanksgiving) is the present time and where the Observer is. As is shown, *yi-qian* and *yi-hou* can be used for all three cases. Specifically, they can respectively mean ‘in the past/before Thanksgiving’ and ‘in the future/after Thanksgiving’, with the present or Thanksgiving as the dividing/reference point. They can also refer respectively to the past and the future of a past point (Halloween), or to the past and the future of a future point (Christmas). That is to say, the uses of these two words have nothing to do with the direction the Observer is facing. In fact, they are consistent with the two special cases of spatial conceptualization of time. In Case 1, time is a moving object, say, a train with its front toward the stationary Observer. Therefore the earlier time is always associated with *qian* ‘front’ and the later time with *hou* ‘back’. In Case 2, time is a still

course, say, a road with the Observer traveling further along it. The end of the road at the Observer's side, which will be covered earlier in time, is always associated with *qian* 'front'. On the other hand, the end further down, which will be covered later in time, is always associated with *hou* 'back'.

Another pair of antonymous localizers are *shang* 'upper/up/over/above' and *xia* 'lower/down/below/under', with the former denoting an earlier time and the latter a later time. In the following are some of the examples in which they form symmetric antonyms.

- (47) a. shang-ban-tian (upper-half-day) 'morning; forenoon'
b. xia-ban-tian (lower-half-day) 'afternoon'
- (48) a. shang-ban-ye (upper-half-night) 'before midnight'
b. xia-ban-ye (lower-half-night) 'after midnight'
- (49) a. shang-ban-yue (upper-half-month) 'the first half of the month'
b. xia-ban-yue (lower-half-month) 'the second half of the month'
- (50) a. shang-ban-nian (upper-half-year) 'the first half of the year'
b. xia-ban-nian (lower-half-year) 'the second half of the year'
- (51) a. shang-bei (upper-generation) 'the elder generation'
b. xia-bei (lower-generation) 'the younger generation'

Parallel to *shang* and *xia* are *tou* 'head/top' and *di* 'bottom', as shown by the following two pairs:

- (52) a. yue-tou (month-head/top) 'the beginning of the month'
b. yue-di (month-bottom) 'the end of the month'
- (53) a. nian-tou (year-head/top) 'the beginning of the year'
b. nian-di (year-bottom) 'the end of the year'

Note that the examples in (47-51) and those in (52-53) are similar in that the 'upper' or the 'head/top' in space represents the earlier in time whereas the 'lower' or the 'foot/bottom' in space represents the later in time.

This pattern of spatial conceptualization of time may be due to our cognitive correspondences between various spatial concepts and between spatial and temporal concepts, as shown in Figure 3.6. In this figure, the correspondence relationships between various concepts are indicated by the curve lines.

Figure 3.6. Correlation between the horizontal and vertical dimensions

It may be argued that such cognitive correspondences are actually based on our bodily experience in the physical world. As humans, we have upright or vertical bodies, with our heads up and our feet down. When we lie down on stomach and crawl, we normally move in the direction of head rather than feet. So our heads become fronts just like the fronts of any moving objects, such as cars, trains, ships, planes, rockets, etc. In addition, the fronts of moving objects usually pass a particular point in space first, i.e. earlier in time than their backs. As four-legged animals, for instance, dogs have horizontal bodies and normally move in the direction of head

rather than bottom. When they try to stand up vertically, they stand on their hind legs with their heads up rather than the other way around. From our bodily and physical experiences in the world we have derived a pattern of cognitive correlations. These correlations bring into reconciliation the two competing models--the anthropomorphic and the zoomorphic models (see, e.g., Allan 1995, Heine, 1995, Svorou 1994)--in our conceptualization of spatial relations and spatial conceptualization of more abstract relations. Specifically, the cognitive correlations between the horizontal and vertical dimensions in Figure 3.6 can account for Case 1 and Case 2 in the spatial conceptualization of time. In Case 1, times are moving entities, with their front toward the Observer. While one month is one entity, twelve of them compose a bigger entity which is a year. The front of an entity is its 'head' or 'top', and the back is its 'bottom'. In Case 2, times are bounded spaces which are each measurable from end to end. The end closer to the Observer is the 'upper/up' or 'head/top' bound, and the further end is the 'lower/down' or 'bottom' bound which can be reached by the Observer only when he has crossed the distance in between. Based on our bodily and physical experiences, we classify 'upper', 'head', 'top', 'front', and 'early' into one category, as opposed to 'lower', 'foot', 'bottom', 'back', and 'later' in another category.

In English, the vertical up-down dimension in its space-time deixis also exists, but it is not expressed in collocationally rich fashion (Alverson 1994, Traugott 1978). The examples in English include the following (from Traugott 1978, Alverson 1994):

- (54) a. Good, that's over (i.e. 'past').
 b. We'll move the meeting up a week (not paired with *down*).

- c. down through the ages (but not 'up through the past')

Indeed, that the earlier is upper and the later is lower should exist in the conceptual system of the English language. Thus, when one draws a family tree, one would put the oldest generation at the top, and then trace it down to the youngest generation, rather than vice versa. Accordingly, a heritage or a property is passed *down*, and never *up*, from generation to generation. In addition, the pair of antonyms *ascendant* and *descendant*, when referring kinship instead of spatial relationship, is also evident of such a metaphorical conceptual structure. It may be assumed that this kind of spatialization of time at the conceptual level is universal, although to what extent it is reflected linguistically varies across languages.

In Chinese, the spatial conceptualization of time of Case 2 is further illustrated by the use of some other localizers in the time domain: *nei* 'inside/within/inner', *li* 'in/inside', *jian* 'between/in', and *zhong* 'middle/in/among/amidst'. These localizers can be used with any length of time, as illustrated by the following examples.

- (55) a. *ben* *shiji* *nei*
 present century inside
 'within the present century'
- b. *jiu-shi* *nian-dai* *li*
 ninety decade in
 'in 90's'
- c. *sange yue* *zhong*
 three month middle
 'within three months'
- d. *wan* *jian*

evening/ninght between
 ‘(in) the evening; (at) night’

In Case 2, the length of time is understood the same as spatial distance. This is evidenced by the parallel structures of sentences expressing spatial distance and temporal length. For example,

- (56) a. Cong Tianjin dao Beijing you yi-bai
 from Tianjin to Beijing have one-hundred
 duo gongli.
 more kilometer
 ‘There are over one hundred kilometers from Tianjin to
 Beijing.’
- b. Cong Tang dai dao xianzai you
 from Tang Dynasty to present have
 yi-qian duo nian.
 one-thousand more year
 ‘There are over one thousand years from Tang Dynasty to the
 present.’
- (57) a. Tianjin juli Beijing you yi-bai
 Tianjin distance Beijing have one-hundred
 duo gongli.
 more kilometer
 ‘The distance between Tianjin and Beijing is over one hundred
 kilometers / Tianjin is over one hundred kilometers away
 from Beijing.’
- b. Tang dai juli xianzai you
 Tang Dynasty distance present have
 yi-qian duo nian.
 one-thousand more year
 ‘(The distance between Tang Dynasty and the present is over
 one thousand years) Tang Dynasty is over one thousand years
 away from the present.’

The parallel structures here have resulted from metaphorical mappings from the domain of space into the domain of time.

Typically, when one talks about *juli* ‘distance’, one will use a pair of antonymous spatial adjectives: *jin* ‘close’ and *yuan* ‘far’. A parallel use of these terms are also found in the domain of time, as shown in the two examples below:

- (58) a. Xianzai li Shengdan Jie hen jin le.
 present distance Christmas Day very close PRT
 ‘It is very close to Christmas Day.’
- b. Zhege haoda gongcheng jungong yi
 this gigantic project complete already
 wei shi bu yuan le.
 in time not far PRT
 ‘The completion of this gigantic project is not far away.’

The temporal use of *jin* ‘close’ and *yuan* ‘far’ is also reflected in the following lexical items:

- (59) a. jin-ri (close-day) ‘recently; in the past few days’
 b. jin-nian (close-year) ‘in the past few years’
 c. jin-dai (close-historical period) ‘modern times’
 d. jin-gu (close-antiquity) ‘closer antiquity’
 e. jin-qi (close-period) ‘in the near future’
 f. yuan-gu (far-antiquity) ‘remote antiquity’
 g. yuan-qi (far-period) ‘at a specified future date; forward’
 h. yuan-zu (far-ancestor) ‘remote ancestor’

The following example is one of the BODY-AS-MIND metaphor, in which the physical ability to see is mapped onto the the mental power of foresight:

- (60) Ni tai jin-shi le, yan-guang yao kan
 ni too close-sighted PRT eye-ray should see
 de yuan yidian.

COM far a bit

‘You are too short-sighted, and you should see a little further away.’

So far I have shown how spatial words in Chinese are transferred metaphorically into the temporal domain in a systematic way that can be accounted for by the two special cases. All these instances constitute the evidence in the lexicon found in the dictionaries. The words are instances of polysemy, with senses related in a fixed way: the spatial sense is primary whereas the temporal sense is secondary, derived metaphorically from the spatial one. This relationship is evidenced in the dictionaries by the given sequence of the senses: the spatial sense is always given before the temporal one. When the fragments of evidence are pieced together, a significant system of metaphor emerges. What is especially significant is that this system of metaphor in Chinese, as a whole, bears such a great similarity to that of English outlined by Lakoff (1990, 1993a, 1994) that once worked out, it provides strong evidence for some universals in the human cognition of time.

While the evidence in the lexicon is the firmest in the sense that it is documented ‘officially’ in dictionaries, it is by no means the sole evidence available for the metaphorical system of time. In the following section, I will demonstrate some evidence existing in the inference patterns.

3.4.2. *Evidence in the Inference Patterns*

In this section I analyze data collected from actual discourse. I will show that the analysis of two special cases can be readily extended from the lexicon to the inference patterns in Chinese discourse.

3.4.2.1. Case One: Time as Moving Object

I first discuss the future and then the past. In Case 1, the future times collocate with the verbs associated with motion through space, such as follows:

- (61) a. lin ‘arrive’
 b. lin-jin (arrive-close) ‘close to; close on’
 c. kao-jin (near-close) ‘draw near; approach’
 d. lai-lin (come-arrive) ‘arrive; come; approach’
 e. dao-lai (arrive/reach-come) ‘arrive’
 f. lai-dao (come-arrive/reach) ‘arrive; come’

Given below are two examples:

- (62) Dang chuntian lailin, zheli shi yi pian
 when spring arrive, here be a expanse
 lüyouyou de zhuangjia.
 green-lush MOD crops
 ‘When spring arrives, this place is an expanse of lush green crops.’

- (63) Yi dai qiu wang libie lüyin de shihou
 a generation ball king part green-grass MOD time
 zheng yi tian tian chao women kaojin.
 PRT a day day toward us approach
 ‘The time when the soccer king of the generation bids farewell to the green (play ground) is approaching us day by day.’

In these two examples, the future time--the spring and the moment of an event--is moving toward where the Observer is. In the following example, the time has undergone personification:

- (64) Xianzai, xin de ‘Taiping-Yang Shiji’ zhengzai
 now, new MOD ‘Pacific-Ocean Century’ PRT
 xiang women zou lai.

toward us walk come
 'Now, the new "Century of the Pacific" is walking toward us.'

In the next example, the time not only moves toward the Observer, but brings something with it, making an impact on the Observer by whom it passes:

- (65) Chuntian dai gei le renmen wuxian
 spring bring to ASP people infinite
 mei-hao de xiwang.
 beautiful-good MOD hope
 'Spring has brought the people infinitely good hopes.'

On the other hand, the Observer can also do something to greet the coming time as if welcoming a guest:

- (66) Women yao fazhan linye, yong gen duo
 we should develop forestry, with even more
 de lü se yingjie er-shi-yi shiji de daolai.
 MOD green color greet twenty-first century MOD arrival
 'We should develop forestry, so as to greet the arrival of the 21st century with more green color.'
- (67) Tamen zhongyu ying lai le fazhan
 they finally greet arrival PRT development
 shi shang de huang-jin jijie.
 history on MOD yellow-gold season
 'They finally saw the arrival of the golden season in their history of development.'

Once the future time arrives where the Observer is, it becomes the present time. Once it passes by the Observer, it becomes the past time.

For the past, the key verb is *guoqu* 'pass by; go by'. The times in the past, long or short, are the times that have 'passed or gone by' the Observer, as shown in the following examples:

- (68) a. Yige duo xiaoshi guoqu le.
 one more hour pass-by PRT
 'More than an hour passed by.'
- b. Zhuan-yan jian, wu nian guoqu le.
 turning-eye moment, five years pass-by PRT
 'In the twinkling of an eye, five years passed'
- c. Yi huang si-shi nian guoqu le.
 a flash forty years pass-by PRT
 'Forty years passed in a flash.'
- d. Nian fu yi nian, si-shi-wu-ge chun-qiu
 year repeat a year, forty-five spring-fall
 guoqu le.
 pass-by PRT
 'Year after year, forty-five years have passed by.'
- e. Guoqu de dou guoqu le.
 pass-by PRT all pass-by PRT
 'What has passed has already passed/Let bygones be bygones.'

In the above examples, *guoqu* is used as a verb meaning 'pass/go by'. It is also used as a noun meaning 'past', as in the following example:

- (69) Zhe yiqie dou chengwei guoqu.
 this all all become past
 'All this has become the past.'

While the past times are said to have gone by, the things which used to exist but no longer exist may be said to have gone with the time, as in (70).

- (70) Zhan-shi de lianmeng guanxi yi yu

war-time MOD alliance relationship already with
 shi tong qu.
 time together go
 'The relationship of alliance during the war has gone with the time.'

Since in Case 1 time is conceptualized as something moving toward and past the Observer, it then has a force that will make an impact on whatever it passes by. This is illustrated by the following two examples:

(71) Liu-shi de sui-yue bu duan de chong dan
 flow-pass MOD year-month not break MOD wash faded
 zhe renmen de jiyi.
 PRT people MOD memory
 'The (flowing and) passing years are constantly washing away people's memories.'

(72) Dang-nian dan-hen leilei, wali pianpian de
 those-years shot-marks countless, debris everywhere MOD
 feixu can yun, yi bei sui-yue
 ruins remnant clouds, already PRT years-months
 chun feng juan zou le.
 spring wind sweep off PRT
 'The ruins in those years, with shot marks and debris everywhere, have been swept off, like remnant clouds, by the spring wind of years.'

In (71) time is conceptualized as flowing waters whereas in (72) it is conceptualized as blowing winds. In both cases, times, conceptualized as dynamic forces, have made a strong impact on humans or places they pass by. In (71) it washes away people's memories when flowing past them. Note that this conceptualization is consistent with the one discussed earlier of recollection: when one wants to recollect or recall one's memories, one has to turn around and run after them in order to catch up with them. The waters in a river may flow faster or slower, which makes the chasing of

memories carried along by them harder or easier. In (72) time, as blowing wind, sweeps away the ruins like clouds in the sky. This metaphorical conceptualization is again consistent with Case 1. In such a way, time is equipped with a metaphorical causative force which time itself literally does not have.

Not only is time conceptualized as natural forces of waters and winds such as in (71) and (72), it sometimes also may undergo animalization or personification, as shown in the example below:

- (73) Cong yige yi shi qu de Han Tang
 from a already passed gone MOD Han Tang
 lishi bei-ying, ke de-chu yige renwen
 historical back-figure, can derive a humanistic
 cengmian de jielun: ...
 level MOD conclusion: ...
 ‘From the back figures of the Han and Tang Dynasties that have
 passed and gone, one can reach a conclusion on the humanistic level:
 ...’

In this example, the two dynasties in the Chinese history are conceptualized as animals or humans that have passed the Observer. When the Observer turns around, it is interesting to note, he can look at them only from behind and see their back figures. The inference pattern is again consistent with the first special case where times are moving toward and past the Observer. When a particular time is moving toward the Observer, its front is facing the Observer. Once it has passed by, the Observer can only see its back .

At this point, I want to make it clear that (71-73) are different from the other examples in that they each contain a more novel rather than conventional metaphor. Despite their novelty, however, they still fall into, rather than outside, the pattern. The analysis here supports the claim that

novel metaphor is but extension of conventional metaphor (Lakoff & Turner 1989, Lakoff 1993a, etc.).

As for the present time, it is conceptualized as where the Observer is. This is illustrated by the following two examples.

(74) Xia qu qiu lai.
 summer go fall come
 'The summer is going and the fall is coming.'

(75) Ku shu ti-zao daolai er-you chichi
 sweltering summer earlier arrive but late
 bu qu.
 not go
 'The sweltering hot summer came earlier but is reluctant to go.'

It is the transition between summer and fall and the hot summer that are referred to respectively in (74) and (75). In either case, the time referred to is with the Observer, and therefore is the present time.

To summarize, the inference pattern for time in Case 1 is as follows:

- (76) a. Times are moving objects, with their fronts toward the face of the Observer.
 b. Those times moving toward the Observer are the future times.
 c. The time that is passing the Observer is the present time.
 d. The times that have passed the Observer are the past times.
 e. Since times are in motion, they have forces, capable of making an impact on the Observer and the environment they pass by, bringing something in and taking something off with them.

It is assumable that this pattern, in its abstraction, is exactly the same as in English and many other languages.

Since time in Case 1 is understood as moving objects, a causative force is then attributed to it. Lakoff and Turner (1989) have discussed a

general case of metaphor of time: TIME IS A CHANGER. ‘Because changes occur as time passes, it is possible to personify time itself as being the agent of change, that is, to see time generally as a changer’ (Lakoff & Turner 1989: 40). As has been seen, this time-as-a-changer metaphor is also found in some of the examples discussed in this section.

3.4.2.2. Case Two: Time as Bounded Space

In Case 2, times are conceptualized as bounded spaces, with units of time comparable to the units of length or distance. The Observer, a traveler in this case, is now in motion. He has come out of the past times, is in the present time, and will enter the future times. Consider the following examples:

- (77) a. Wushi yu nian de licheng ta jiu shi
 fifty more years MOD journey he just be
 zheyang zou guo lai de.
 like-this walk over come PRT
 ‘He walked over the past of over fifty years like this.’
- b. Gongheguo zou guo sishi-wu nian bu pingfan
 republic walk over forty-five years not ordinary
 licheng.
 journey
 ‘The Republic has walked over an extraordinary journey of
 forty-five years.’
- c. Women dang yijing zou guo le
 our party already walk over PRT
 qishi-san nian de guanghui licheng.
 seventy-three year MOD brilliant journey
 ‘Our Party has walked over a brilliant journey of seventy-
 three years.’

In these three examples, a person, a nation, or a political party is said to have traveled ‘on foot’ over a journey through time rather than space. Also at work in these examples is the conceptual metaphor LIFE IS A JOURNEY. In (77b) and (77c), another metaphor or personification maps a nation and a political party onto a person. Similarly, in the following example, the juvenile period is conceptualized as an earlier section of the journey of life.

- (78) Gao Yubao ban zhe Zhongguo qian-baiwan
 Gao Yubao accompany PRT China thousand-millions
 haizi zou guo shaonian shidai.
 children walk through juvenile period
 ‘Gao Yubao accompanies millions and millions of Chinese children walking through their juvenile period.’

Here Gao Yubao is a well-known author of children’s books in China. The sentence in fact contains an instance of metonymy, where the author is mapped onto the books he has written.

Note that in (77b) and (77c) the conceptual metaphor may as well be said as HISTORY IS A JOURNEY. This is made clear in the following example:

- (79) Yi-jiu-jiu-si nian shi Zhongguo Jianshe
 nineteen-ninety-four year be China Construction
 Yinhang lishi shang de yige zhongyao lichengbei.
 Bank history on MOD one important milestone
 ‘1994 is an important milestone in the history of the Construction Bank of China.’

A particular point in journey as marked by a milestone is mapped onto a particular point in time. The mapping thus helps realize the spatial conceptualization of time.

Once the Observer has passed a time, conceptualized as a location, that location becomes the past. As the Observer moves on, he is further and further away from that location of the past. This point is exemplified by the following sentence:

- (80) Tamen zhengzai yi-bu-yi-bu de gaobie guoqu.
 they PRT step-by-step MOD take-farewell past
 'They are leaving the past step by step.'

When the Observer is leaving the past, he is at the same time moving into or toward a future time, as in the two examples below:

- (81) a. Zhongguo bao-kan fengfeng
 Chinese papers-magazines one-after-another
 gaobie 'qian yu huo' de shidai, jing
 take-farewell 'lead and fire' MOD age enter
 ru 'guang yu dian' de shidai.
 into 'light and electricity' MOD age
 'One after another, the newspapers and magazines in China are taking farewell of the age of "lead and fire", entering the age of "photoelectricity".'
- b. Tamen gaobie le yingchen de zuotian,
 they bid-farewell PRT gloomy MOD yesterday,
 zou xiang guanghui de mingtian.
 walk toward bright MOD tomorrow
 'They have left the gloomy yesterday and are walking toward the bright tomorrow.'

In addition to the verbs *jin* 'enter' and *zou* 'walk' as in the above two examples, other verbs, such as *bu* 'step', *kua* 'stride', *mai* 'stride', *ben* 'run quickly', and *congci* 'sprint', are also used to highlight various manners in which the Observer goes toward or enters future times, as in the following examples.

- (82) a. Ta yi bu ru zhong-nian.
he already step into middle-age
'He already stepped into middle age.'
- b. Renlei jijiang kua ru xin shiji.
mankind soon stride into new century
'Mankind will soon stride into the new century.'
- c. Zhongguo zheng jian-bu mai xiang
China PRT vigorous-step stride toward
ershi-yi shiji.
twenty-first century
'With vigorous steps, China is striding toward the twenty-first century.'
- d. Tamen zheng mai zhe da bu, ben
they PRT stride PRT big step, run-quickly
xiang canlan de mingtian.
toward splendid MOD tomorrow
'With big strides, they are running toward the splendid tomorrow.'
- e. Tamen zhengzai xiang xin shiji chongci.
they PRT toward new century sprint
'They are sprinting toward the new century.'

In this group of examples, the Observer is said to move at different paces or speeds. *Bu* 'step' in (82a) is at a normal walking speed; *kua* 'stride' in (82b) and *mai* 'stride' in (82c) indicate a faster pace with bigger steps. *Ben* 'run quickly' is much faster while *chongci* 'sprint' is the fastest as in a one-hundred-meter dash. The interesting thing is that the one who 'steps' and the one who 'sprints' toward the new century will finally enter the new century simultaneously. It is 'the manner of doing in space' rather than 'the speed of moving in time' that is suggested by the verbs of motion involved.

However, one spends less time on the same task if one works harder. So one can finish the task ahead of the schedule and save some time. This is, nevertheless, often conceptualized metaphorically as one moving faster in time. The following sentence, for instance, is a common statement reflecting such a metaphorical conceptualization:

- (83) Ta zhi yong le shige yue jiu wancheng le
 he only use PRT ten months already accomplish PRT
 quannian renwu, tiqian jinru xiayi nian.
 whole-year task, ahead-of-time enter next year
 ‘He only used ten months to accomplish the whole year’s task, having entered next year ahead of time.’

Here ‘having entered next year ahead of time’ is apparently metaphorical, or rather metonymic, with time standing for the task associated with it.

Also belonging to Case 2 is the conceptualization of development, where the Observer, now a racer, is in a race against other racers. The difference between the ‘racers’ is, therefore, counted with the units of time rather than units of distance. For instance:

- (84) Gai guo shenghuo shuiping bi mouxie
 this country living level compare some
 fada guojia luohou wushi nian.
 developed countries behind fifty years
 ‘The living standard of this country is fifty years behind those of some developed countries.’

The gaps between ‘racers’, however, can be narrowed or widened. In the following example, for instance, the gap is narrowed because the ‘behind racer’ has accelerated:

- (85) Zhe shi wo guo de diannao jishu
 this make our country MOD computer technology

shuiping xiang-qian zhuigan le ershi nian.
 level forward catch-up PRT twenty years
 'This made our country's computer technology close the gap by
 twenty years.'

If the gap used to be fifty years, for instance, it is now only thirty years as a result of acceleration by the 'behind racer'.

In Case 2, since the Observer is conceptualized as a traveler in time, he can thus bring something with him, just as a traveler brings some luggage. Consider the following examples:

- (86) a. Zhe zhong xin xing ke-ji Boyin qiqiqi
 this kind new model passenger-plane Boeing 777
 jiang ba Boyin Gongsi dai ru ershi-yi shiji.
 will PRT Boeing Company bring into twenty-first century
 'The new-model passenger plane Boeing 777 will bring the
 Boeing Company into the twenty-first century.'
- b. Zhong Ri liang guo renmin
 Chinese Japanese two countries people
 yuanyi jiang yige lianghao de Zhong-Ri
 willing PRT one good MOD Sino-Japan
 guanxi dai ru ershi-yi shiji.
 relationship bring into twenty-first century
 'The Chinese and Japanese peoples are willing to bring a good
 Sino-Japan relationship into the twenty-first century.'
- c. Women yiding nenggou ba yige fanrong
 we definitely can PRT one prosperous
 de Zhongguo dai ru ershi-yi shiji.
 MOD China bring into twenty-first century
 'We certainly can bring a prosperous China into the twenty-
 first century.'
- d. Women yinggai ba renlei dai jin
 we should BA mankind bring into

heping, fazhan he fanrong de
 peaceful, developmental and prosperous MOD
 ershi-yi shiji.
 twenty-first century
 'We should bring the mankind into a peaceful, developmental
 and prosperous twenty-first century.'

Here, something brought by the Observer is a company in (86a), a relationship in (86b), a country in (86c), and mankind in (86d). Especially interesting is (86a), where a product of a company brings the company into a future time rather than vice versa. It is worth noting that these examples are but a natural extension of the basic TIME-AS-SPACE metaphor. The metaphor here is therefore conceptual rather than merely linguistic. In each case, however, it also correlates with a more concise linguistic expression. The paraphrase of the English translation of (86d) can be, for instance, 'We should make the world a peaceful, developmental and prosperous place for the mankind to live in in the twenty-first century.'

Sometimes, a mixed metaphor of time can occur in discourse, as illustrated by the following example:

- (87) Ershi-yi shiji zai xiang renlei zhao shou.
 twenty-first century PRT to mankind wave hand
 Women yinggai ba shenme yang de shijie
 we should PRT what kind MOD world
 dai dao xin shiji ne?
 bring to new century PRT
 'The twenty-first century is beckoning to mankind. What kind of
 world should we bring into the new century?'

In the first sentence, the twenty-first century is personified, i.e. it is a person 'waving (hand)' to us. In the second sentence, it becomes the

location into which the Observer is to move. The two seemingly contradictory metaphors (i.e. person vs. location), however, are brought into reconciliation by the semantic role of goal. In both sentences, the twenty-first or new century is the goal for the traveler. It is the goal-location in the second sentence whereas it is the goal-greeter in the first. While the one in the second sentence is the default metaphor in Case 2, the one in the first sentence plays some extra functions. For instance, it suggests the closeness of the next century: the traveler has to get close enough to see the 'greeter'. It also suggests a friendly and desired future time: the traveler will feel welcomed when he sees the greeter waving hand. Therefore, the metaphor in the first sentence is only an extension of the default Case-2 metaphor, where a time is conceptualized as a location.

To sum up, Case 2 entails the following inferences:

- (88) a. Times are locations, with measureable bounded spaces.
 b. The Observer is in motion, traveling over locaitons.
 c. The locations the Observer has gone through are the past times.
 d. The location where the Observer is is the present time.
 e. The locaitons the Observer will go into are the future times.
 f. The Observer can move at a slower or faster pace against a schedule or against other travelers.
 g. The Observer can bring something into the future locations.

These entailments may again be shared by English and many other languages.

3.4.2.3. *The Duality: Mixture of Case One and Case Two*

In the last two sections, I have discussed how the two special cases of time, Case 1 and Case 2, work separately within the general metaphor

system of time in which time is conceptualized in terms of object and location. The two special cases, however, can sometimes work together in an object-location pair, within a single linguistic expression. Lakoff (1993a) calls such a phenomenon ‘duality’. He notes that ‘it is possible for two different parts of a sentence to make use of two distinct metaphorical mappings at once’ (219). The example he gives is *within the coming weeks*, where ‘*within* makes use of the metaphor of time as a stationary landscape which has extension and bounded regions, whereas *coming* makes use of the metaphor of times as moving objects’ (219). Lakoff then explains the underlying mechanism of such duality:

This is possible because the two metaphors for time pick out different aspects of the target domain. The *coming weeks* conceptualizes those weeks as a whole, in motion relative to the observer. *Within* looks inside that whole, conceptualizing it as a bounded region with an interior. Each mapping is used partially. Thus, although the mappings--as wholes--are inconsistent, there are cases where parts of the mappings may be consistently superimposed. The Invariance Principle allows such parts of the mappings to be picked out and used to characterize reasoning about different aspects of the target domain. (219)

As we will see, the phenomenon of ‘duality’ also exists in Chinese, in very much the same fashion as in English. Consider the following examples:

- (89) a. zai guoqu de jige shiji li
 PRT have-passed MOD a-few centuries in
 ‘in a few centuries that have passed/in the past few centuries’
- b. zai weilai san nian nei
 PRT haven’t-yet-come three years within
 ‘within the three years to come/within the coming three years’

As discussed earlier, *guoqu* ‘have passed’ and *weilai* ‘haven’t yet come’ are respectively the Chinese words for ‘past’ and ‘future’, and *li* ‘in’ and *nei* ‘within’ are localizers which are primarily spatial terms denoting locations of things. *Guoqu* ‘have passed’ and *weilai* ‘haven’t yet come’ make use of the Case-1 metaphor of time as moving object while the localizers make use of the Case-2 metaphor of time as stationary bounded landscape.

In the above examples discussed, duality exists in the lexicon: the relevant words represent established and fixed correspondences between the space and time domains. Semantically, those spatial words have acquired conventionalized temporal senses, no longer looked upon as metaphorical, although such acquisition was originally motivated by metaphor. Syntactically, those examples are phrases, lower than the sentential level. In the following, on the other hand, the two examples cited are ones at the sentential level and above, namely, the discoursal level. They are also more inferential in character.

- (90) Huaxia dadi he shi song zou chuntian bu ru
 China land what time see off spring step into
 xiatian ne?
 summer PRT
 ‘When does the land of China see off the spring and step into summer?’

- (91) Zai Guo-Qin sishi-wu zhou-nian lailin zhi ji,
 PRT National-Day forty-fifth anniversary arrive MOD time
 wo zhuyuan weida zuguo zhigua yunfan
 I wish great mother-land raise sail
 shi xiang gen jia huihuang de xin shiji.
 sail toward even more brilliant MOD new century
 ‘When the forty-fifth National Day is arriving, I hope that the great mother land will raise her sails and sail into the even more brilliant new century.’

In (90) the two verbs make use of two special-case mappings. The land of China *sees off* the spring as a moving object whereas it *steps into* the summer as a bounded space. Arguably, both verbs entail personification: the former personifies both subject and object and the latter makes its subject an action-performing agent. In (91) different clauses or sentences make use of two distinct metaphorical mappings. Thus, while the national day is *coming* as a moving object, the ship of the nation *sails into* the new century as an expanse of ocean.

As has been seen, duality exists in both lexical and inferential levels in Chinese.

3.4.2.4. *Another Case: Time and Observer Moving in the Same*

Direction

Above I have shown that the Chinese system of metaphor of time in terms of space falls into the patterns outlined by Lakoff (1990, 1993a, 1944) for English. Specifically, there are two special cases. In Case 1, time as an object is moving with its front toward the Observer. In Case 2, time is stationary landscape with the Observer moving over it. In fact, there exists a third special case in which time is conceptualized as moving in the same direction as the traveling Observer. The third case is reflected in the philosophical view of time: 'The peculiarity of time is that it is intangible; we cannot hold it. We ourselves are in time moving with it. When we say it is 10.30, it is no longer 10.30; time has moved on and we along with it' (Keshavmurti 1991: 47).

Lakoff and Turner (1989) discussed this case which they called an alternative version of Case 2. In this case, 'the present time itself can be seen as a point moving toward future points in scheduled time' (45). The English examples of this case include the following:

- (92) a. The hour is approaching midnight.
 b. It's getting close to bedtime.
 c. We're racing against time to finish the assignment.
 d. We're trying to beat the clock.
 e. We are ahead of time.
 f. Time waits for no man.

Lakoff, in discussing the event structure metaphor, mentioned the metaphorical conceptualization of expected progress in terms of 'a travel schedule' which, in turn, is conceptualized as 'a virtual traveler ... who reaches pre-arranged destinations at pre-arranged times' (1993b: 221). He cited the following English examples (221-22):

- (93) a. We're behind schedule on the project.
 b. We got a head start on the project.
 c. I'm trying to catch up.
 d. I finally got a little ahead.

In this section I will show that in Chinese time is sometimes also conceptualized as a virtual traveler moving in the same direction as the Observer. This metaphorical mapping is exemplified by the following Chinese old sayings or catch phrases which are closely parallel to the sentence as in (92f) above:

- (94) a. Shi bu wo dai.
 time not me await
 'Time will not await me.'

- b. Shijian bu deng ren.
 time not wait-for person
 'Time will wait for no person.'

That is to say, time is always moving at its own pace, and people have to keep the same pace to avoid falling behind.

That time is sometimes moving in the same direction as the Observer is also illustrated by the following time expressions:

- (95) a. shi zhi jinri
 time reach today
 'up to today/up to the present time'
- b. Shijian tuiyi dao gongyuan yi-jiu-jiu-si nian.
 time move to Christian era 1994 year
 'Time has moved to 1994 A.D.'

In (95a), time, as a moving object, has moved from the past, say 'yesterday', to 'today', and will continue to move into 'tomorrow' in the future. In (95b), the same kind of time has moved from the past to '1994', and will further move into 1995, 1996, etc. In this particular kind of construal, therefore, time has a dual character. First, there exists a stationary landscape of time, or time-landscape, with bounded locations representing units of time, such as a day, a month, a year, etc. Secondly, there exists a moving object of time traveling over the landscape from the past to the present and to the future. The location where the time-object is is the present time.

Under such a basic conceptualization of time, there exist a few subcases where time undergoes different mappings. First of all, time is personified as a person moving at his own pace. In this case, the

personified time is often *shidai* ‘times/age/era/epoch’, as shown in the example below:

- (96) Women bixu gen shang shidai de
 we must follow up age MOD
 bu-fa, cai neng gen-hao de bawo shidai de maibo.
 step-pace, then can better MOD grasp age MOD pulse
 ‘We must follow up the times’ pace, so as to better feel the age’s pulse.’

Here, *shidai* ‘age’ is mapped onto a person who is walking or running at a particular pace and who has a particular pulse. In Chinese medicine, doctors usually find out people’s physiological conditions by feeling the pulse at their wrists. In the above example, the editorialized ‘we’ feel the age-person’s pulse to determine his social, economic, or political condition. To do this, however, ‘we’ have to first keep pace with him. The following example also illustrates the metaphor:

- (97) Women yinggai yu shidai tong bu,
 we should with age together step,
 yu gaige tong xin.
 with reform together go
 ‘We should step together with the age, and go together with the reform.’

In China, this is the age of change and the cause of the change is reform. This sentence says that people’s minds should keep up with the change. But the concept is cast in the metaphor of time as a moving object/person. The example below further illustrates the metaphor:

- (98) Dangqian, shijie ke ji ri-xin-yue-yi,
 at-present, world science technology day-new-month-different,
 bixu zhua jin xuexi, yu shi ju jin.

must grasp tight study, with time together advance
 ‘Nowadays, sciences and technology in the world are developing
 very rapidly, and we must study hard, and advance with time.’

Since sciences and technology in the present world are changing so fast,
 ‘with a new look in a day and a different look in a month,’ one has to study
 hard to keep up with the change, or he will fall behind times. Again, the
 image is simple: the age is moving forward rapidly while the Observer is
 trying to catch up with him. However, not everyone can catch up with the
 fast-moving time, and that is what the following example says:

- (99) Hu Peng yinwei gen bu shang shidai
 Hu Peng because follow not up age
 er luo-wu, Yu Songtao ze he zhe shidai
 so fall-behind, Yu Songtao in-contrast keep PRT age
 bu-fa er da-bu xiang-qian.
 step-pace so big-step move-forward
 ‘Hu Peng has fallen behind because he cannot follow up the step pace
 of (i.e. keep up with) the age, while Yu Songtao is striding forward
 because he can keep pace with the age.’

Here the contrast between the two characters (in a Chinese film) is
 conceptualized as their difference or gap with respect to time: one moves
 with the time while the other lags behind it. The one behind may fall
 further and further behind if he does not catch up. It is a typical example in
 which abstract difference, mental or ideological, is spatialized
 metaphorically.

An interesting thing to note is that people not only keep pace with, or
 fall behind, the age, they can also pass and go ahead of the age. The
 following sentence is an example:

- (100) Women yao shi-zhong zou zai shidai de qianmian.
 we want beginning-end walk at age MOD front
 'We should always walk in front of the age.'

Of course, it is an ideal situation where one can 'always walk in front of the age'. This sentence can be said about 'having the power of foresight'. In business, for instance, it would be ideal if one could always predict consumers' 'trends' of the times. In such a case, it is the abstract ability to predict that is cast in the spatial metaphor.

The notion that one can go behind, ahead of, or side by side with time may conceptualize the third special case of time as a 'race', with time and the Observer as two racers. Thus, we have the following examples:

- (101) a. Zhi shengxia liangge yue shijian le.
 only left two months time PRT.
 Women zai xuduo wenti shang xuyao
 we PRT many problems on need
 yu shijian saipao.
 with time race
 'Only two months are left. On many problems we need to race with time.'
- b. Women yao qiang zai shijian de qianmian.
 we should rush PRT time MOD front
 'We should rush ahead of time.'
- c. Ta shi yige zou/pao zai shijian qianmian
 he be a walk/run PRT time front
 de ren.
 MOD person
 'He is a person walking/running ahead of time.'

These examples may be similar, in character, to the English examples cited in (92) and (93). Regarding examples such as in (92) Lakoff and Turner

have discussed in some detail how time in this case is conceptualized as runner against whom people are racing (1989: 45-46):

there are two metaphoric paths here: a purposive path and a time path. They are oriented in the same direction: the direction from us to our goals is the same as the direction from the present to the future (since we are in the present and our goals are in the future). Moreover, there is something moving along each path--we toward our purposes, and the present time toward the future. Thus the two runners (us and the present time) are headed in the same direction along parallel paths. This makes it easy to conceive of the situation as a foot race between us and an opponent (the present time), who is running in the same direction as we are, along a parallel path. We win the race against time if we achieve the goal before the deadline, that is, before the present time reaches the time at which the goal must be accomplished.

This discussion applies exactly to the Chinese examples as in (101).

In (101) time is conceptualized in terms of a person walking/running in the same direction as the Observer, as if in a walking or running 'race'. In Chinese culture, time passing is also conventionally conceptualized in terms of waters flowing. For instance, *chaoliu* 'tide/tidal current/trend' is conventionally mapped onto *shidai* 'times/age/era/epoch', as in the following example:

- (102) Zai xiandai wenming de qianglie chongji xia,
 PRT modern civilization MOD strong impact under
 shan qu nong jia zheng ying zhe
 mountain area peasant families PRT face PRT
 xin de shuguang, yingtou-gan-shang shidai chaoliu.
 new MOD dawn-light, try-hard-to-catch-up times trend
 'Under the strong impact of the modern civilization, the peasant
 families in the mountain area are facing the new dawn, and trying
 hard to catch up with the trend of the times.'

Here the backward peasant families in the mountain area are behind the ‘trend of the times’, but are ‘trying hard to catch up with it’. Their backwardness can be measured in terms of time--twenty years, thirty years, etc.--which, in turn, is spatialized relative to the ‘trend of flowing time’. In this metaphorical conceptualization, the trend of time keeps flowing forward. If you cannot keep pace with it, you fall behind it. If you can go faster than it, however, you ‘lead’ the trend, as in the following example from a TV commercial:

- (103) Songxia dian qi lingdao shidai xin chaoliu.
 National electrical equipment lead times new trend
 ‘The National electrical equipment leads the new trend of the times.’

Again, the idea of advancedness is spatialized relative to the ‘trend of times’. If one is advanced in any abstract terms, one is taking the lead spatially.

The fact that time passing is conceptualized as waters flowing is also evidenced in the conceptualization of ‘history’, which exists in and through time. Thus we have the graphic ‘cliché’ of *lishi de chang he* ‘the long river of history’. A different conceptualization of ‘history’ and ‘times/age’ is that they are a vehicle, especially a train. Similar to a river, a train is long and powerful, providing an ideal source-image for ‘history’ or ‘times/age’. With its huge and powerful wheels, a train seems to be unstoppable, rolling forward in the direction of the future, as shown in the example below:

- (104) Lishi de che lun gungun xiang-qian,
 history MOD vehicle wheels rolling-rolling move-forward
 jue-bu ke dao zhuan.
 never can reverse turn

‘The wheels (of the vehicle) of history are rolling forward, and can never be reversed.’

Here, although a more general term *che* ‘vehicle’ is used, as is often the case, the image in mind seems to be a train exclusively, rather than a car, a bus, or even a heavy-duty truck. It seems that the correspondences between the train and ‘history/times/age’ are fixed. Even though only a part of the train (in this case, ‘wheels’) is activated, the whole image of a train is triggered.

As the above examples have shown, there is a third special case of the metaphorical treatment of time in Chinese which can be summarized as follows:

- (105) a. Time has a dual nature, i.e., it consists of both a moving object (time-object, sometimes personified) and fixed locations (time-location).
 b. The time-object is a virtual traveler, traveling at its own pace, and reaching prearranged locations at prearranged times.
 c. It has come from the past and is going to the future.
 d. The locations it has gone through are the past times; the location where it is is the present time; the locations it will move through are the future times.
 e. The Observer traveling in the same direction as the time-object is supposed to keep pace with time, but can fall behind it, or even go ahead of it.

As summarized, this case is a combination of Case 1 (the time-object version) and Case 2 (the time-location version). It can be taken as a separate special case, namely, Case 3 instead of an alternative of Case 2. It should be noted, however, that Case 3 shows itself in language in a more restricted fashion than Case 1 and 2. But it is still a different

conceptualization of time in terms of space. It is again assumed that Case 3 is shared by English and Chinese and, most likely, by many other languages.

3.5. Summary

In this chapter, I have analyzed the metaphor system for time in Chinese. My study reinforces Alverson's (1994) claim that the relativity in the experience and expression of time is situated in, and must be understood in terms of, a framework of experiential and linguistic universals, supporting his 'spatialization of time' hypothesis that the experience of time is based on a universal template of spatial experience. However, my study disagrees with Alverson's specific conclusion about the space-time deixis in Chinese, which states that in Chinese the experiencer (the Observer) is always stationary, facing the direction of the past, with the back to the future. Instead, I have demonstrated that time is conceptualized systematically in terms of space in Chinese just as in English. Specifically, I have found that the two special cases--Case 1 and Case 2--specified by Lakoff (1990, 1993a, 1994) for the metaphor system of time in English are readily applicable in Chinese. Evidence from both lexicon and inference patterns is cited to show that Case 1 and Case 2 can account for the bulk of Chinese time words and expressions which constitute a unified system of metaphor. This system can be generalized by a single central metaphor: TIME PASSING IS MOTION. In Case 1, time is conceptualized as objects moving toward and past the stationary Observer.

In Case 2, time is conceptualized as stationary locations through which the moving Observer travels.

In the lexicon, the words for 'past' literally mean either 'something that has passed by the stationary Observer' (Case 1), or 'something left behind by the traveling Observer' (Case 2). The words for 'present' characterize it as 'right with the Observer', especially as 'right before the Observer's eyes or face'. Therefore, the present is the time the Observer is 'seeing' right before him. This characterization of the present time is suitable to both Case 1 and Case 2. The words for 'future' have the literal senses of either 'something that has not yet come but will come to the stationary Observer' (Case 1), or 'something toward which the Observer is traveling' (Case 2). The fact that the future is conceptualized as in front of the Observer and the past behind the Observer is evidenced by the verbs collocating with the words of 'future' and 'past'. One always 'looks forward/ahead to the future'. As for the past, one always has to 'turn around' in order to recall or recollect it. Sometimes, in order to 'reach' the past, one also has to 'run after' it so as to 'catch up with' it. It is also noted that some apparently contradictory uses of spatial words in temporal senses can be accounted for by the parametrical selection of the point of reference: the time vs. the Observer. The differences between them reduce to the difference between Case 1 and Case 2. Finally, it is demonstrated that Chinese localizers and other spatial words have developed their temporal senses, constituting a systematic transfer from the space domain to the time domain. There is evidence suggesting that such transfer is anything but arbitrary.

Similar evidence is also found in the inference patterns. In Case 1, i.e. time as moving objects, times approach the stationary Observer with their fronts toward him. Since they are in motion, they have dynamic force. They can bring something to the Observer, thus making an impact on him or causing a change in or around him. On the other hand, the Observer can also do something to greet the arrival of a particular time. The time that is passing the Observer is the present time. Those times that have passed the Observer are the past times. Times can also take something away with them when they pass the Observer, thus again making an impact on him or causing a change in or around him. For those times that have passed by, the Observer can only turn around to see their backs.

In Case 2, i.e. times as stationary locations or bounded regions, the Observer travels, as if on a journey, from the past to the present, and then to the future, with units of time comparable to the units of length or distance. Once the Observer passes a time, that time becomes the past. The time where the Observer is is the present time. The time which the Observer is going to enter is the future time. The Observer can go faster or slower than other travelers, which suggests the Observer's faster or slower change or development relative to others'. While the Observer moves into a future time, he can also bring something with him into that time. This also suggests that the Observer is to make a change by that particular time. That this kind of qualitative change is understood in terms of spatial movement will be discussed in the next chapter.

In this chapter, I have also shown that what Lakoff calls 'duality'--a phenomenon in which both Case-1 and Case-2 metaphors are mixed in a

single expression--also exists in Chinese, in exactly the same fashion as in English. I have shown that it actually exists on all linguistic levels--on phrasal, clausal and discoursal levels.

Finally, I have demonstrated that at the inferential level there exists a third special case or Case 3, where time is moving in the same direction as the Observer. While time moves at its own pace, the Observer is trying to keep pace with it. However, the Observer can fall behind it or lead it, as if in a race. In this case, the time-object (Case 1) and the time-location (Case 2) co-exist like two sides of a coin.

In addition, this study of the metaphor system of time in Chinese reinforces the claim for the universality of the general MIND-AS-BODY metaphor in human abstract reasoning, understanding, and meaning. In the Chinese case, for instance, the verbs collocating with words of 'future' and 'past' clearly express mental activities in terms of bodily activities. When people think of the future, they 'look forward to' it; when they think of the past, they 'turn around' and even 'run after' it. These examples provide typical illustrations of how concrete physical concepts work their way up into human abstraction via metaphor.

Another issue on which this study has shed some light is the distinction between the literal and the metaphorical. None of the lexical examples I cited would nowadays be taken as metaphorical by native speakers of Chinese and, in effect, they would be surprised if they were told so. But they are clearly metaphorical, as I have shown, in the sense that they have been transferred from the space domain to the time domain.¹² They are, therefore, linguistic instantiations of the TIME-AS-

SPACE metaphor which is primarily conceptual in nature. The metaphorical expressions are conventionalized and may not appear metaphorical in the mind of individual speakers of Chinese. What bears special significance, however, is the systematicity with which these metaphorical expressions are governed by the underlying conceptual metaphor and patterned within and across languages. The pattern reflects the general imaginative structure of human cognition, and therefore deserves cognitive linguists' special attention.

The present study has also shed some light on the distinction between novel and conventional metaphors. Among the inferential examples I cited, while all of them contain metaphors of time in terms of space, some are more novel than others. However, as has been seen, there only exists a difference of degree between novel and conventional metaphors. In essence, they are based on the same mechanism and follow the same Invariance Principle (Lakoff 1990, 1993a, 1994, Turner 1990, 1993). The correspondences between the space and time domains are fixed. It is just a matter of which mappings have been activated and which have not, and which have been conventionalized and which have not. The data from Chinese support the claim that novel metaphor is but an extension of conventional metaphor (Lakoff & Turner 1989).

Finally, I would like to touch upon the status of the TIME-AS-SPACE metaphor. It can be hypothesized that this central conceptual metaphor is universal, reflecting the general process of human cognition in which time has to be understood, and reasoned about, in spatial terms. So it is a universal principle. However, under this general principle, there exists a

directionality parameter with a limited number of settings. It is likely that this parameter has only two settings: (1) future in the front, and (2) future in the back. Of these two settings of the parameter, the first one is widespread, shared by most languages in the world, including, for instance, English and Chinese. The second setting exists in a more restricted fashion, shared by a limited number of languages such as Trique, Maori, Ancient Greek, etc. (Allan 1995: 29).¹³ Cross-cultural and cross-linguistic studies should find out what settings are applied in what languages, and what special cases exist in what languages, so as to determine both universality and relativity among languages and cultures.

NOTES:

¹ In Alverson 1994, #time# refers to the experience of time, which is differentiated from “time”, which refers to the expression of time in language.

² For a review of Alverson 1994 see Tyler 1995. In this review, Tyler raised the question regarding the representativeness of Alverson’s database: ‘are we justified in deciding that Alverson’s five categories are universal on the basis of only four languages?’ (568) This, of course, is an empirical question that can be answered for certain after sufficient number of languages have been studied. Tyler also raised the question if entification is spatialization. It seems reasonable to say that spatialization, in a broad sense, includes entification or objectification since entities and objects, which are three-dimensional in character, always exist in space.

³ I use ‘Observer’ for Lakoff’s ‘observer’, with the capital ‘O’ indicating its nature of abstraction. Traugott (1978) used ‘ego’, and Alverson (1994) used ‘speaker/experiencer’, in a similar sense.

4 The main dictionaries I referred to in citing lexical examples are Wang 1992 and Wei 1995. In the lexical examples, the parentheses contain a word-for-word or, rather, morpheme-for-morpheme translation, and the quotation marks contain a more free translation. Also, note that Chinese is a language that lacks morphological markings. In the morpheme-for-morpheme English translation in the parentheses, I used the past participles *passed* and *gone* instead of the infinitives *pass* and *go* for the purpose of making the reading clearer to the reader. In Chinese, however, the reading of a verb's aspectual features (e.g. *go* vs. *going* vs. *gone*) is apparent in the context.

5 It needs to be pointed out here that the word *wang* can also be used as a preposition meaning 'toward' or 'in the direction of'. Used as such, it has the fourth tone (vs. the third tone when it is used as a verb) and refers to either past or future times, depending on its collocation. I will come back to this point later.

6 Here, the *yi* in (12c) is not the same as the one in (12b). The one in (12b) is originally an adverb meaning 'already', while the one in (12c) is a preposition-like particle (hence PRT) implying a dividing line in time, space, or quantity. In (12c) it implies the present as a dividing line that distinguishes the past (what is gone) from the future (what is coming).

7 According to Wang (1993: 187), *chen*, originally meaning 'dust', also means 'trace' in an extended sense. Therefore, *qiang-chen* refers metaphorically to 'one's experience in the past'.

8 In the word-for-word gloss, the following abbreviations are used: MOD=modifier marker, COM=complement marker, PRT=particle. To make the gloss simpler, I will use PRT in an all-inclusive manner, to include various grammatical or functional particles, such as aspectual markers, passive-voice markers, sentence-final particles, nominalizers, *de* in emphatic cleft sentences, and *ba* and *jiang* in *ba*-sentences, since these features are not so crucial in my analyses.

9 In (17c, d) *shi* is marked by different superscripts to indicate that they have different tones. That is, they represent different characters and different words. The same distinction is made in the subsequent examples where applicable.

¹⁰ Svorou 1994 contains a cross-linguistic study, covering data from 55 languages, of body-part terms grammaticalized to spatial terms (i.e. spatial terms), which are then extended for nonspatial uses, including temporal uses.

¹¹ In (36) the agent of 'coming' could also be time if we consider another special case--Case 3--to be discussed in detail in 3.4.2.4. In Case 3, time consists of two parts: a time-object and a time-landscape. The Observer travels with the time-object over the time-landscape in the direction of future.

¹² Engberg-Pedersen (1995) argues that the concept of domain in the cognitive theory of metaphor is never defined but taken for granted, and that space and time are cognitively linked in the mind so that they are not two cognitively different domains. While I agree that the concept of domain in the contemporary theory of metaphor is still not well-defined (Dirven 1993 also touches upon this point), I hope that I have presented in this chapter a more convincing case that argues for space and time as two different conceptual domains no matter how closely they are linked to each other cognitively.

¹³ Alverson (1994: 104) mentioned that the 'back-to-the-future' temporal orientation is also found in Latin and in certain native languages of Latin America--for example, the Mayan language, Quiche.

CHAPTER 4

THE EVENT STRUCTURE METAPHOR IN CHINESE

4.1. The Conception of Events

In Chapter 3, I discussed how time is conceptualized in terms of space in Chinese. In this chapter, I turn to the spatial conceptualization of events in Chinese. Events are closely related to time just as objects to space. The parallel relationships of space and objects and time and events are exemplified in the following definition of space and time (Keshavmurti 1991: 1):

For ordinary understanding, Space is defined as an extension in which material objects stand or move; it is also the distance between objects. Time too, like Space, is an extension, but an extension of events; it is the measure of duration which holds a succession of events of all kinds. Space is a static extension for it holds objects and things in a fixed order, whereas Time holds and contains a succession of events and movements and is therefore a mobile extension.

In short, 'Events occupy time as bodies occupy space' (Keshavmurti 1991: 19). As a matter of fact, as Keshavmurti put it (1991: 16), it is 'because events take place and things happen' that 'we become aware of time in our daily living'.

The interesting point here is that, while time is conceptualized in terms of space, so are events.

4.2. The Event Structure Metaphor in English

Lakoff and his associates have worked out the system of the Event Structure Metaphor in English (Lakoff 1990, 1993a, 1993b, 1994). The

central claim is that 'various aspects of event structure, including notions like states, changes, processes, actions, causes, purposes, and means, are characterized cognitively via metaphor in terms of space, motion, and force' (Lakoff 1993b: 219). Just as the conceptualization of time consists of two special cases, i.e. a case of objects and a case of locations, as discussed in Chapter 3, Lakoff (1993a, 1993b, 1994) argues that the Event Structure Metaphor also has two special cases which, just like those of time, constitute a duality in the event structure system. The two special cases are called the 'object-dual' and the 'location-dual'. In fact, the event structure system consists of two systems: one based on objects, and the other based on locations. According to Lakoff, in both systems, CHANGE IS MOTION and CAUSES ARE FORCES. But their difference is this (Lakoff 1993b: 226):

In the location system, change is the motion of the thing changing to a new location or from an old one.

In the object system, the thing changing doesn't necessarily move. Change is instead the motion of an object to, or away from, the thing changing.

To illustrate the difference, Lakoff cites as an example the word 'trouble' and makes the following explanation (1993b: 227):

I'm in trouble. [Trouble is a location]

I have trouble. [Trouble is an object that is possessed]

In both cases, trouble is being attributed to me, and in both cases, trouble is metaphorically conceptualized as being in the same place as me (co-location)--in one case, because I possess the trouble-object and in the other case, because I am in the trouble-location. That is, attribution in both cases is conceptualized metaphorically as co-location. In 'I'm in trouble', trouble is a state. A state is an attribute that is conceptualized as a location. Attributes (or properties) are like states, except that they are conceptualized as possessable objects.

According to Lakoff 1990, 1993a, 1993b, and 1994, the details of these two versions of the event structure system in English are as follows.

4.2.1. The Location-Dual

The location-dual of the Event Structure Metaphor includes the following submappings (Lakoff 1993b: 219):

- (1) The Location-Version
 - a. States are locations (bounded regions in space).
 - b. Changes are movements (into or out of locations).
 - c. Causes are forces (controlling movement to or from locations).
 - d. Actions are self-propelled movements.
 - e. Purposes are destinations (desired locations).
 - f. Means are paths (to destinations).
 - g. Difficulties are impediments to motion.
 - h. Expected progress is a travel schedule; a schedule is a virtual traveler, who reaches pre-arranged destinations at pre-arranged times.
 - i. External events are large, moving objects.
 - j. Long term, purposeful activities are journeys.

As Lakoff put it, The Event Structure Metaphor 'is a rich and complex metaphor whose parts interact in complex ways', and its mapping 'generalizes over an extremely wide range of expressions for one or more aspects of event structure' (Lakoff 1993b: 219). In thinking or talking about states and changes, for instance, people 'speak of being in or out of a state, of going into or out of it, of entering or leaving it, of getting to a state or emerging from it' (219). In fact the entailments and examples of

the Event Structure Metaphor form a rich system in English. Some of them, from Lakoff (1993b: 220-21), are given below.

In the submapping 'Difficulties are impediments to motion', there are five types of metaphorical difficulties that have been noticed in English: blockages, features of the terrain, burdens, counterforces, and lack of an energy source. These are shown in (2) below:

- (2) a. Difficulties as Blockages
 - He got over his divorce.
 - He's trying to get around the regulations.
 - We ran into a brick wall.
- b. Difficulties as Features of the Terrain
 - He's between a rock and a hard place.
 - It's been uphill all the way.
 - We've been hacking our way through a jungle of regulations.
- c. Difficulties as Burdens
 - He's carrying quite a load.
 - He's weighed down by a lot of assignments.
 - Get off my back!
- d. Difficulties as Counterforces
 - Quit pushing me around.
 - She's leading him around by the nose.
 - She's holding him back.
- e. Difficulties as Lack of Energy Source
 - I'm out of gas.
 - We're running out of steam.

Another example of a rich system of metaphorical expressions is related to the concept of 'actions'. As listed above, the submapping concerning 'actions' is that 'Actions are self-propelled movements'. It has numerous

entailments which cover a wide range of linguistic expressions, as the following examples show:

- (3) a. Starting an Action is Starting out a Path
 We are just starting out.
 We have taken the first step.
- b. Aids to Action are Aids to Motion
 It is smooth sailing from here on in.
 It's all downhill from here.
- c. Manner of Action is Manner of Motion
 We are moving/running/skipping right along.
 We slogged through it.
 We are leaping over hurdles.
 I'm walking on eggshells.
 He is treading on thin ice.
 He is walking a fine line.
- d. Speed of Action is Speed of Movement
 He flew through his work.
 She is going by leaps and bounds.
 I am moving at a snail's pace.

Related to 'action' is the concept of 'progress'. When you are taking action to achieve some purpose, you are moving toward the destination. So 'progress' is understood in terms of movement and physical distance:

- (4) a. Making Progress is Forward Movement
 We are moving ahead.
 Let's forge ahead.
- b. Amount of Progress is Distance Moved
 We've come a long way.
 We've covered lots of ground.
- c. Undoing Progress is Backward Movement
 We are sliding backward.

We are backsliding. We need to backtrack.
It is time to turn around and retrace our steps.

d. Lack of Progress is Lack of Movement

We are at a standstill.
We aren't getting any place.
We are going nowhere with this.

While 'progress' is understood in terms of 'movement', the concept of 'means' is conceptualized as 'path' on which movement takes place. Thus:

(5) A Different Means of Achieving a Result is a Different Path

Do it this way.
She did it the other way.
Do it any way you can.
However you want to go about it is fine with me.

Whenever you have a purpose to achieve, you go toward that purpose which is the 'destination'. But if you do not have a particular purpose in mind, you move around without a destination:

(6) Lack of Purpose is Lack of Direction

He is just floating around.
He is drifting aimlessly.
He needs some direction.

When one tries to achieve one's purpose, one tries to reach the destination.
Therefore,

(7) Success is Reaching the End of the Path

We are seeing the light at the end of the tunnel.
We only have a short way to go.
The end is in sight.
The end is a long way off.

In the above examples, such abstract concepts as states, changes, actions, means, progresses, purposes are conceptualized spatially, and to be more exact, in terms of locations. That is, all these concepts are understood as part of the movement from one location to another. This version of conceptualization is therefore called ‘the location-dual’ of the duality in the event structure system. The other dual of the duality is called ‘the object-dual’.

4.2.2. *The Object-Dual*

The object-version of the Event Structure Metaphor has the following submappings:

- (8) The Object-Version
 - a. Attributes are possessions.
 - b. Changes are movements (of possessions, namely, acquisitions or losses).
 - c. Causes are forces (controlling the movement of possessions, namely, giving or taking away).
 - d. Actions are self-controlled acquisitions or losses.
 - e. Purposes are desired objects.
 - f. Achieving a purpose is acquiring a desired object (or ridding oneself of an undesirable one).

(8f) has the following expressions under it:

- (9) Achieving a Purpose Is Getting a Desired Object
 - They just handed him the job.
 - It's within my grasp.
 - It slipped through my hands.
 - He is pursuing a goal.
 - Seize the opportunity.

In some cases, the desired object is something to eat. So the mapping is 'Achieving a purpose is getting something to eat':

(10) Achieving a Purpose Is Getting Something to Eat

He savored the victory.
All the good jobs have been gobbled up.
He's hungry for success.
The opportunity has me drooling.
This is a mouth-watering opportunity.

Traditional methods of getting things to eat are hunting, fishing, and agriculture, and therefore the mapping in (10) has three special cases accordingly, as in (11) below:

(11) a. Trying to Achieve a Purpose is Hunting

I'm hunting for a job.
I'm shooting for a promotion.
I'm aiming for a career in the movies.
I'm afraid I missed my chance.

b. Trying to Achieve a Purpose Is Fishing

He's fishing for compliments.
I landed a promotion.
She netted a good job.
I've got a line out on a good used car.
It's time to fish or cut bait.

c. Trying to Achieve a Purpose Is Agriculture

It's time I reaped some rewards.
Those are the fruits of his labor.
The contract is ripe for the picking.

Besides, external events are also conceptualized as moving objects. This conceptualization has three special cases too in English, as shown below:

(12) External Events are Large Moving Objects

a. Special Case 1: Things

Things are going my way.
 Things are going against me these days.
 Things took a turn for the worse.

b. Special Case 2: Fluids

You gotta go with the flow.
 He's up a creek without a paddle.
 We're all in the same boat.

c. Special Case 3: Horses

Try to keep a tight rein on the situation.
 Keep a grip on the situation.
 Wild horses couldn't make me go.

The above English examples, as Lakoff (1993b: 223) argued,

provide overwhelming empirical support for the existence of the Event Structure Metaphor. And the existence of that metaphor shows that the most common abstract concepts--TIME, STATE, CHANGE, CAUSATION, ACTION, PURPOSE and MEANS--are conceptualized via metaphor. Since such concepts are at the very center of our conceptual systems, the fact that they are conceptualized metaphorically shows that metaphor is central to ordinary abstract thought.

In what follows I attempt to work out the system of the Event Structure Metaphor in Chinese.

4.3. The Location-Version in Chinese

I first focus on the location-version, which seems to be the major one in both English and Chinese. I will demonstrate that the mappings of the location-version of the Event Structure Metaphor in (1) above, as specified by Lakoff (1993b, 1994) for English, can be applied without modification in Chinese. I will deal with various aspects of events separately, but in fact

they are usually correlated, and therefore the discussion of one cannot be completely separated from another or the others.

4.3.1. *States*

For the aspect of state, the mapping is given in (1a) above, repeated here as (13a). Closely related to the aspect of state is the aspect of change, and the mapping that should go with (13a) is (13b).

- (13) a. STATES ARE LOCATIONS (BOUNDED REGIONS IN SPACE).
- b. CHANGE OF STATES IS CHANGE OF LOCATIONS.

The reasoning here is accomplished via metaphor with specific mappings as follows:

<u>The Source Domain</u>	<u>The Target Domain</u>
Space	Reasoning about states
locations	states
movement	change

The metaphorical mappings above are based on the two most recurrent image-schemas: the CONTAINER and the SOURCE-PATH-GOAL. With (13a), a Theme, abbreviated as T, is said to be either IN or OUT of a state. In this case, the state is conceptualized as the CONTAINER (i.e. a bounded region in space), which is schematically figured as a circle, following convention. Note that a circle drawn on paper is two-dimensional, but it can stand for a three-dimensional container as well, depending on particular conceptions. Just as in the physical world, if the location is a house, it is usually taken as three-dimensional. Thus, (13a) can be expressed by the two versions of the CONTAINER schema as follows:

Figure 4.1. Two versions of the CONTAINER schema

The Theme T is either IN or OUT of the CONTAINER, as respectively the cases are in version A and B in Figure 4.1. Here the CONTAINER stands for the state.

The metaphorical mapping in (13b) can be expressed by a combination of the CONTAINER and SOURCE-PATH-GOAL schemas. This combination also has two versions as in Figure 4.2 below:

Figure 4.2. Two versions of the CONTAINER and the SOURCE-PATH-GOAL schemas in combination

In both version A and B, the Theme T that is undergoing change is to move relative to the structure of the CONTAINER, which stands for a state. In A, T moves from the CONTAINER’s exterior, which is the SOURCE of the PATH, to its interior, which is the GOAL of the PATH. In B, T moves from the interior, the SOURCE, to the exterior, the GOAL. In both versions, the arrow-headed line indicates the direction and the path of the movement. In

this way, the two image-schemas and combination of them structure the abstract domain of reasoning about states and their change.

The metaphorical mapping in (13a), i.e. STATES ARE LOCATIONS (BOUNDED REGIONS IN SPACE), is immediately reflected in the Chinese lexicon. Quite a few words meaning 'state' or closely related senses have a literal spatial sense of 'location/position', as given below. In (14) are a few monosyllabic words.

- (14) a. bu (step) 'condition; situation; state'
 b. di (place/locality/land/ground) 'situation; position'
 c. jing (place/area/territory) 'condition; situation; state; circumstances'

Note that in (14a) *bu* 'step' is a kind of location in walking movement. In walking, which is the basic form of movement among human beings and most animals, the change of locations is accomplished through the change of steps, and each step constitutes one location. The examples of how the words in (14) are used to mean abstract 'state' or related senses are given in (15) below:

- (15) a. Shiqing zenme fazhan dao zhe yi bu?
 things how develop to such a step
 'How did things get into such a state?'
 b. Ta buxing luo dao zhe yi bu.
 he unfortunate fall to such a step
 'He unfortunately fell into such a state (plight).'
 c. Women li yu bubai zhi di.
 we stand in invincible MOD place
 'We are in an invincible position.'
 d. Shi guo jing qian.

thing passed place moved (changed)
 ‘The affair is over and the situation has moved (The incident
 is over and the circumstances are different/changed).’

The two metaphorical mappings--STATES ARE LOCATIONS and CHANGE OF STATES IS CHANGE OF LOCATIONS--in (13) are well illustrated in these examples. In (15a, b), ‘steps of movement’ in space represent separate states in the process of change, since CHANGE OF STATES IS CHANGE OF LOCATIONS. (15c) is a typical example in which the location of the person stands for the abstract state he is in. (15d) is another instance in which the change of states is understood as change of locations. Note that it is not the same location that has moved, but an implied T that has moved to a different location.

(16) below contains some disyllabic compounds composed of words in (14) and others:

- (16) a. jing-di (place/area/territory-place/locality/land/ground)
 ‘situation; state; condition; circumstances’
 b. jing-jie (place/area/territory-boundary/scope/circle) ‘state;
 realm’
 c. jing-yu (place/area/territory-land within certain
 boundaries/territory/region) ‘situation; state; condition;
 circumstances’
 d. chu-jing (located-place/area/territory, i.e. the place where sb.
 is located) ‘unfavorable situation; plight’
 e. di-bu (place/locality/land-step) ‘condition; state; plight’
 f. tian-di (field-place/locality/land/ground) ‘wretched situation;
 plight’
 g. kun-jing (difficult-place/area/territory) ‘difficult position;
 predicament’
 h. kun-chu (difficult-location) ‘difficult situation; predicament’
 i. ku-jing (bitter-place/area/territory) ‘wretched situation;
 terrible plight’

- j. can-jing (miserable-place/area/territory) 'miserable condition; tragic circumstances; dire straits'
- k. jue-jing (desperate/hopeless-place/area/territory) 'hopeless situation'
- l. jue-di (desperate/hopeless-place/locality/land) 'hopeless situation'
- m. si-di (dead-place/locality/land) 'a fatal position; deathtrap'

Although these words, as well as those in (14), differ to some extent in meaning and usage, they are all related to the sense of an unfavorable or even dangerous 'state', mapped metaphorically from a spatial domain to an abstract domain. An interesting fact is that of all the words here, only (16f) and (16k) have a primary sense in the spatial domain: the former means 'field/farmland' and the latter 'a danger spot/a very dangerous place'. All the others are used only in an abstract sense related to 'state'. In the following are some more words which have their primary senses referring to something in the physical world, and which have been extended metaphorically to refer to some state or situation in the abstract domain.

- (17)
- a. ni-keng (mud-pit) 'mire; morass'
 - b. ni-zhao (mud-marsh/swamp/bog) 'mire; morass; slough'
 - c. ni-nao (mud-mire) 'mire; morass'
 - d. huo-keng (fire-pit) 'fiery pit; abyss of suffering'
 - e. shen-yuan (deep-pool) 'abyss'
 - f. ku-hai (bitter-sea) 'sea of bitterness; abyss of misery'
 - g. qiong-tu (end-way) 'dead end; impasse'
 - h. mo-lu (end-road) 'dead end; impasse'

As can be seen, there exists a parallelism between Chinese and English in terms of the mappings of the source-domain concepts onto the target-domain ones. From the examples in (17a-f) we can see that both Chinese and English share two orientational conceptual metaphors: THE DESIRED IS

UP and THE UNDESIRED IS DOWN, which map spatial concepts UP/DOWN onto abstract concepts DESIRED/UNDESIRED. Therefore, if T is to change into a relatively worse state, the path of movement can be level, but very often it is downward, and it is unlikely that it will go upward. That is to say, as in Figure 4.3 below, version A presents the possible angles of paths for changing into unfavorable states while those in version B are impossible.

Figure 4.3. A contrast in path angles

It is worth noting that the level and downward paths in version A of the above figure can denote the change of T into either a favorable or unfavorable or neutral state. In contrast, the upward paths in version B seem to stand for only change into a favorable state. For now I just mention that the difference between these two versions is demonstrated by the verbs. I will show how it is so shortly.

(17g) and (17h) also present similar cases between Chinese and English. But this time T is IN a bad state and cannot get OUT because there is no way OUT. The spatial conceptualization of such a situation is schematically shown in Figure 4.4 below:

Figure 4.4. No way out for T in the container

As can be seen, all the lexical items in (14), (16) and (17) in some way manifest the general metaphorical mappings in (13) where states are understood as locations and change of states is conceptualized in terms of change of locations. Further evidence is provided by the verbs and/or localizers in collocation with the nouns indicating various kinds of states. For instance, the following examples reflect the mapping STATES ARE LOCATIONS:

- (18) a. Guo-you qiye chu-yu lianghao zhuangtai.
state-owned enterprises be located in fine state
'The state-owned enterprises are in a fine state.'
- b. Ganbu ying zijue zhi shen yu qunzhong
cadres should willingly place body in the masses
de jian du zhi-zhong.
MOD surveillance inside
'Cadres should willingly place themselves in (under) surveillance by the masses.'
- c. Ta taozui zai zhe juda xiyue zhi-zhong.
he be intoxicated PRT this huge joy inside
'He is intoxicated in a huge joy.'

In these three examples, T, i.e. 'state-owned enterprises' in (a), 'cadres' in (b) and 'he' in (c) are located physically in some state: 'a fine state' in (a), 'the surveillance by the masses' in (b), and 'huge joy' in (c). As in the

examples, states are understood as bounded regions represented schematically as CONTAINER in which T is physically located. In the following examples the verbs of movement through space help realize the metaphorical mapping CHANGE OF STATES IS CHANGE OF LOCATIONS. (19) presents examples in which T changes into a state:

- (19) a. Zhexiang gongcheng jin ru yunxing.
 this project enter into motion
 'This project got into motion (i.e. got started).'
- b. Jichu gongye jianshe bu ru jia jing.
 basic industries construction step into good state
 'The construction of basic industries stepped into a good state.'
- c. Ta yi ji da reqing tou ru xin
 he with extremely great enthusiasm throw into new
 de yanjiu zhi-zhong.
 MOD research inside
 'With great enthusiasm he threw himself into the new research.'
- d. Women yinggai jiji tou shen yu gaige.
 we should actively throw body in reform
 'We should actively throw ourselves into the reform.'
- e. Gai guo xian ru le dongluan zhi-zhong.
 this country sink into ASP turmoil inside
 'This country sank into a turmoil.'
- f. Ni zenme luo dao zhe ban tiandi?
 you how drop to such kind plight
 'How come you dropped into such a sorry plight?'
- g. Ta die jin le wanzhang shenyuan.
 he fall into ASP ten-thousand-zhang-deep abyss
 'He fell into a bottomless chasm.'
- h. Ta diao jin le ku-hai.

he fall into ASP bitter-sea
 'He fell into an abyss of misery.'

Of these examples, (e-h) present examples of change into an unfavorable or miserable state. Typically, the verbs have semantic features of [-intentional] and [+downward]. (20) below contains examples of change out of a state:

- (20) a. Daduoshu nongmin yi zou chu pingkun.
 most peasants already walk out-of poverty
 'Most peasants already walked out of poverty.'
- b. Ta wu fa baituo gudu yu jimo.
 he no way break away from solitude and loneliness
 'He couldn't break away from solitude and loneliness.'
- c. Ta zhongyu tiao chu le huo-keng.
 he finally jump out ASP fire-pit
 'He finally jumped out of the fiery pit.'

Of the three verbs denoting the paths of motion here, the first two have the feature of [+level], and the last one is [+upward], typical of the verbs denoting change from an unfavorable into a favorable state.

As mentioned earlier, a [+level] path of movement is neutral: it can denote change into or out of a favorable or unfavorable state. On the other hand, [+downward] and [+upward] paths of movement seem to be more restricted in use. Take the following group of English sentences for example:

- (21) a. The country used to be prosperous, but it now has fallen into poverty.
 b. The country used to be poor, but it has now risen into prosperity.

- c. The country used to be poor, but it has now risen out of poverty.
- d. The country used to be prosperous, but it has now fallen out of prosperity.
- e. * The country used to be poor, but it has now fallen out of poverty.
- f. * The country used to be prosperous, but it has now risen out of prosperity.
- g. * The country used to be prosperous, but it has now risen into poverty.
- h. * The country used to be poor, but it has fallen into prosperity.

As mentioned earlier, this semantic distinction in the use of verbs is due to a pair of generic-level conceptual metaphors: THE DESIRED IS UP and THE UNDESIRED IS DOWN. This pair of conceptual metaphors is functioning in conjunction with the metaphorical mappings in (13), namely STATES ARE LOCATIONS and CHANGE OF STATES IS CHANGE OF LOCATIONS, to govern metaphorical extensions of verbs discussed above. All these verbs have a primary spatial sense, denoting movement in space. However, they are mapped into an abstract domain to denote change of states.

So far most, if not all, of the examples I have discussed are very much conventionalized. In the following I turn to more novel examples. As will be seen, however, these examples are based on exactly the same conceptual metaphors as in (13). Although they are extended or elaborated to various degrees, they are structured by the same image-schemas as in Figure 4.1 and Figure 4.2.

First consider the following examples:

- (22) a. Ta zhi shen yu xifang zhexue zhuzuo de

he place body in Western philosophy books MOD
 wang yang da hai zhi-zhong.
 boundless ocean vast sea inside
 'He immersed himself in the boundless ocean and vast sea of the
 books on Western philosophy.'

- b. Jingji zou bu chu weiji quan.
 economy walk not out crisis circle
 'The economy cannot walk out of the circle of crisis.'
- c. Tamen changqi zai pinji de chuantong
 they over-a-long-time PRT barren MOD traditional
 nongye jingji zhong paihuai.
 farming economy inside pace-up-and-down
 'Over a long period of time, they paced up and down in the
 barren traditional farming economy.'
- d. Gai gongsi meiyou baituo chuantong
 this company hasn't break-away-from traditional
 jingying moshi.
 management model
 'This company hasn't broken away from the traditional
 management model.'
- e. Ren bu neng lao zai qian-yan li dazhuan.
 person not can always PRT money-hole in spin
 'A person cannot keep going round and round in the money
 hole.'

In (22a), the CONTAINER is the 'ocean and sea' of books. That is, T is in the state of reading a great quantity of books. Although reading is an action, continuous reading is a state. In (22b), the CONTAINER is the 'circle of crisis'. T, the economy, moves, but only within its boundaries. It means the economy is IN the state of crisis. The CONTAINER in (22c) is the backward 'farming economy'. T could not 'break away from' the backward state though it made some insignificant changes, i.e. 'paced up and down', within

the CONTAINER. The CONTAINER in (22d) is the ‘traditional management model’ IN which the company still stays. In (22e), the CONTAINER is the ‘money hole’, which is a small square hole in ancient Chinese money--bronze coins. If a person is obsessed by the desire to make money, he/she is said to ‘be keeping going round in the money hole and to be unable to get out of it’. Since the money hole is very small, the person spinning inside it must be very tiny and paltry too. Although the four examples convey very different experiences, they are all structured by a single image-schema which is version A in Figure 4.1, or the one in Figure 4.4.

Next, I turn to a different group of examples:

- (23) a. Tamen tansuo chu yitiao zou chu kun-jing
 they explore out a walk out-of difficult-place
 de lu.
 MOD road
 ‘They groped and found a path to walk out of the difficult situation.’
- b. Miandui shen zhong de pingkun, tamen xuanzhe
 face deep heavy MOD poverty they select
 le xin de tuwei lu-jing.
 ASP new MOD break-out-of-an-encirclement road-path
 ‘Facing the deep and heavy poverty, they selected a new path to break out of the encirclement (of poverty).’
- c. Ta cong guoqu de yinying zhong zou chu.
 he from past MOD shadow inside walk out
 ‘He walked out of the shadow of the past.’
- d. Yantai pingguo zhongyu zou chu di gu,
 Yantai apples finally walk out-of low valley
 da ru guoji shichang.
 hit into international market
 ‘Yantai apples finally walked out of the low valley, and broke into the international market.’

Again, the examples here are structured by a single image-schema, but this time, by version B in Figure 4.2. The metaphor that maps the image-schema, which is spatial in character, into the abstract domain of reasoning about the change of states is CHANGE OF STATES IS CHANGE OF LOCATIONS, as in (13b). The CONTAINER in (23a) is the 'difficult situation', in which T was trapped. However, T 'found out a path to get out of it through groping'. The conceptual metaphor that is functioning in conjunction is A MEANS IS A PATH, which I will discuss in some detail in a later section. The CONTAINER in (23b) is 'poverty', which is a kind of hostile force that surrounds T. After several attempts and failures, T had just 'selected a new path to break out of the encirclement of poverty'. Here, the 'new path' represents a new means. In (23c), the CONTAINER is the patch of 'shadow' which, as we know from our own experience or from cultural models, usually represents an unfavorable state.¹ We also know from our everyday experience that shadows are lower spatially than the things that cast them if the sources of light are the sun, the moon, etc. This fact is at least consistent with the generic-level metaphors mentioned previously: THE DESIRED IS UP and THE UNDESIRED IS DOWN. The effect of these metaphors is even clearer in (23d) in which the CONTAINER is location with a special terrain--the 'low valley'. Note that in this example T moved into another CONTAINER--the 'international market'. The manner with which it got into it is not an easy one: it did not simply 'step into' it; instead it 'broke into' it. The verb *da* in Chinese means 'to hit', 'to beat',

and ‘to fight’, among many others. It connotes a ‘battle’ or a ‘fight’ for T to get into the international market and stay competitive there.

Finally, I come to the image-schema of version A in Figure 4.2. This image-schema again structures a very wide range of metaphorical expressions mapping spatial reasoning onto abstract reasoning. Look at the following five examples in (24).

- (24) a. Zuowei kexuejia, ta yong chuang jin-qu.
 as scientist he bravely break forbidden-zone.
 ‘As a scientist, he bravely broke into the forbidden zone.’
- b. Ta daitou xiang ganzhang waiked zhe pian
 he take-the-lead toward liver surgery this stretch
 huangwu de chunü di faqi chongji.
 waste MOD virgin land launch charge
 ‘He launched and led the charge onto the waste virgin land of liver surgery.’
- c. Yinjin guowai zhili de gongzuo mai
 import abroad intelligence MOD work stride
 ru le yige xin tian-di.
 into ASP a new heaven-earth
 ‘The work of importing intelligence from abroad strode into a new state/stage.’
- d. Women yao ba Sichuan Sheng tui dao
 we will PRT Sichuan Province push to
 shijie jingji de da wutai shang-qu.
 international economic MOD big stage onto
 ‘We will push Sichuan Province onto the big international economic stage.’
- e. Ta de qi yi jin ru dian-feng zhuangtai.
 he MOD chess skill enter into summit-peak state
 ‘His chess skill entered a state of summit and peak.’

The CONTAINER in (a) is ‘the forbidden zone’, which refers metaphorically to the research in a scientific field that is extremely difficult. Similarly, the CONTAINER in (b), ‘the waste virgin land’, is the research in liver surgery that nobody had worked on before. In (c) ‘the work of importing intelligence from abroad’ entered a ‘new heaven-earth’. The spatial metaphor is again based on the CONTAINER schema. The verb *mai* ‘stride’ suggests faster change or development than, for instance, *zou* ‘walk’ or *bu* ‘step’. That is, the speed of change is understood as the speed of motion. In (24d), the CONTAINER is ‘the big international economic stage’. T, i.e. ‘Sichuan Province’, stands metonymically for its economy. It is personified as an actor to perform on the big stage of the world economy. (24e) is an example in which the two metaphors STATES ARE LOCATIONS and THE DESIRED IS UP work together.

In the next two examples in (25), the CONTAINERS are buildings rather than two-dimensional locations.

- (25) a. Dang shi de shehui yijing kua ru le
 that time MOD society already stride over ASP
 renlei wenming de menkan.
 mankind civilization MOD threshold
 ‘The society then already strode over the threshold of human civilization.’
- b. Nongmin chuang-deng gao-ya yishu diantang.
 peasants intrude-ascend high-elegant art palace
 ‘The peasants intruded into and ascended the palace of high and elegant art.’

In (a) ‘the threshold’ is metonymic of the whole building of ‘human civilization’. (b) is an example in which the peasants who are traditionally

considered as low in social status started to practice 'high and elegant art'. They are therefore said to 'intrude into the palace of high and elegant art' where they did not belong according to the traditional view. Their 'ascending the palace' is symbolic of a change in their social status. The sentence conveys, metaphorically, a new social phenomenon that was taking place in a changing society and that caught many by surprise.

In summary, I have discussed in this section how abstract reasoning about states and their change is based on metaphor that maps concepts in the space domain onto concepts in an abstract domain such as states and their change. The two conceptual metaphors are 1) STATES ARE LOCATIONS (BOUNDED REGIONS IN SPACE) and 2) CHANGE OF STATES IS CHANGE OF LOCATIONS. As I have shown, these two metaphors are structured by two image-schemas--the CONTAINER schema and the SOURCE-PATH-GOAL schema. The two basic elements here, in addition to the Theme T, are the CONTAINER, which represents the state-location, and the PATH, which represents the change-movement. The conceptualization and expression of the rich experience with states and their change are actually structured by these two spatial image-schemas.

From the data I have analyzed, we can see that the two metaphors in (13) are fundamentally conceptual in nature and they may or may not be realized at the linguistic level. At the conceptual level, there exist the state-location and change-movement mappings. At the linguistic level, the mappings are denoted by nouns, verbs and localizers, and there are various cases. In the first case, the nouns denoting 'state' do not have a spatial sense of 'location' which they receive from the verbs and/or localizers in

collocation with them. For instance, the Chinese word *zhuangtai* ‘state’ is an abstract noun. It, by itself, does not have any spatial implications. However, it acquires a ‘location’ sense when it occurs, for instance, with *chu yu* ‘located in’, *bu ru* ‘step into’, *xian ru* ‘fall into’. This is also true of those words denoting a kind of state such as *pingkun* ‘poverty’, *gudu* ‘solitude’, and *jimo* ‘loneliness’. In the second case, the nouns denoting ‘state’ have a literal sense of ‘location’, but it has lost that literal sense and retained, instead, an extended abstract sense of ‘state’. For instance, the word *jing-di* ‘state/condition’ literally means ‘place/area/territory-place/locality/land/ground’, although this literal sense of ‘location’ is lost and it now retains only an abstract sense of ‘state’. In the third case, the nouns denoting ‘state’ simultaneously have a primary sense of ‘location’ and the primary sense of ‘location’ and the secondary sense of ‘state’ exist together. The words *tian-di*, which means both ‘field/farming land’ and an ‘unfavorable state’, and *di-gu*, which means both ‘low valley’ and an ‘unfavorable state’, are such kind of examples. There is still another case in which the nouns referring to a ‘state’ have only a ‘location’ sense, and their sense of ‘state’ is purely a result of transferring the inference patterns in the space source domain into the target domain of reasoning about the abstract concept of ‘state’. When the word *diantang* ‘palace’ is used to refer a kind of state, it serves as such an example.

4.3.2. Changes

In the last section, I mentioned that various aspects of the event structure are correlated and cannot be separated from one another. As in

(13), the two conceptual metaphors for the aspect of state are 1) STATES ARE LOCATIONS and 2) CHANGE OF STATES IS CHANGE OF LOCATIONS. Therefore, 'change' is actually understood in terms of 'movement' through space from one location to another, and the conceptual metaphor for it is:

(26) CHANGES ARE MOVEMENTS (INTO OR OUT OF BOUNDED REGIONS).

where 'bounded regions' refers to states. Schematically, CHANGES ARE MOVEMENTS is again based on a single image-schema, namely the SOURCE-PATH-GOAL schema, as in Figure 4.5 below:

Figure 4.5. The SOURCE-PATH-GOAL schema

Here S stands for SOURCE; G for GOAL; and the arrowhead line for PATH. If the parenthesized part is taken into account, then the two versions of image-schema in Figure 4.2 above are ready to apply: version A for MOVEMENT INTO A BOUNDED REGION and version B for MOVEMENT OUT OF A BOUNDED REGION. However, these two versions can be combined into a single version, as given in Figure 4.6 below:

Figure 4.6. Changes are movements from one location to another

Here the two circles, i.e. the two bounded regions, respectively stand for the SOURCE and GOAL, and the arrowhead line represents the PATH for movement. Metaphorically, the two circles stand for two states, and the

path indicates the change of T OUT OF one state, the SOURCE, and INTO another, the GOAL. Note that the distance between the SOURCE and the GOAL is a variable. It can be next to each other or very far apart.

The conceptual mapping in (26) is a generic-level one which does not specify the kind of movement. From our own experience, we know that there are at least three kinds of movement, namely movement on the land, movement on the water, and movement in the air. In fact, all these kinds of movement are reflected in our reasoning about the aspect of change.

As human beings, our basic form of movement on the land is accomplished through movement of our legs. We walk, run, and jump, and these forms of movement are mapped onto the aspect of change as in the following examples.

- (27) a. Yige yue-lai-yue xiandaihua de Beijing Cheng
 a more-and-more modernized MOD Beijing City
 zheng xiang women zou lai.
 PRT toward us walk come
 ‘A more and more modernized Beijing City is walking toward us.’
- b. Zhongguo zai bian, zai yan zhe kangzhuang
 China PRT change PRT along PRT broad
 fuyu de da-dao xun pao.
 prosperous MOD main-road fast run
 ‘China is changing, running fast along the broad road toward prosperity.’
- c. Gai chang ren jiang tiao-yue shi fazhan.
 this factory still will jump-leap way develop
 ‘This factory will still develop in a jumping and leaping way.’

Note that the movement with our legs, whether it is walking, or running, or sometimes jumping, is made with consecutive steps, which

constitute the basic units of movement with our legs. Interestingly, the Chinese word *bu* ‘step’ is used extensively in the Chinese lexicon to describe change, which is conceptualized in terms of movement in space. Look at the following examples:

- (28) a. jin-bu (forward-step) ‘advance; progress; improvement’

Ni-de fayin hen you jin-bu.
 your pronunciation very have forward-step
 ‘Your pronunciation has greatly stepped forward (improved).’

- b. tui-bu (backward-step) ‘lag/fall behind; retrogress’

Ta xuexi tui-bu le.
 he study backward-step ASP
 ‘He slipped back in his studies.’

As is seen, the abstract ideas of ‘progress’ and ‘retrogression’ are originally understood as spatial movement in terms of ‘steps forward and backward’, although this is hardly noticed. Now, look at the next examples:

- (29) qi-bu (start/begin-step) ‘start/starting; begin/beginning’

- a. Jianshe gongzuo xian yi qi-bu.
 construction work now already start-step
 ‘The construction work has now started (its steps).’

- b. Liang-guo jing-mao hezuo qi-bu bu cuo.
 two-country economy-trade cooperation starting-step not bad
 ‘The starting step (i.e. the beginning) of the two countries’ cooperation in economy and trade is not bad/rather good.’

- c. Gaige tui-dong le shichang jingji de qi-bu.
 reform push-move ASP market economy MOD starting-step
 ‘The reform initiated the starting step of the market economy.’

- d. Women ying gao hao qi-bu chanye,

we should do well starting-step industry
 conger dai-dong quanju.
 so-as-to pull-move whole-situation
 ‘We should run the starting-step (initiative) industry well, so
 as to make the overall situation going.’

In (29a) *qi-bu* is used as a verb meaning ‘to start’. In (29b, c) *qi-bu* is used as a noun meaning ‘beginning’, although grammatically they function as subject and object respectively in the sentences. Differently, *qi-bu* in (29d) is used attributively to modify *chanye* ‘industry’. Together, *qi-bu chanye* denotes the ‘industry that is capable of bringing the whole economy into motion’. In all these cases, *qi-bu* refers to a change of states understood as movement.

There are other words containing *bu* ‘step’ in Chinese. Given below are some examples:

- (30) a. Nongchun yiliao-weisheng wang chu-bu jianli.
 countryside medical-health network initial-step be built up.
 ‘The medical and health service network in the countryside is
 built up initially.’
- b. Guojia zhengzai zhu-bu gaibian bu
 state-government PRT step-by-step change not
 heli zhuangtai.
 reasonable state
 ‘The state government is changing the unreasonable state step
 by step.’
- c. Wo guo de jingji gaige yu zhengzhi
 our country MOD economic reform and political
 gaige shi tong-bu jinxing de.
 reform be same-step carried on PRT
 ‘Our country’s economic and political reforms are carried on
 simultaneously/at the same pace.’

- d. Zhe you zhu yu Zhongguo de jin-yi-bu gaige.
 this has help to China MOD further-one-step reform
 'This will help China's (one-step) further reforms.'
- e. Yishujia zui kebei de jieju jiu shi ting-bu
 artist most sad MOD ending just be stop-step
 bu qian.
 not advance
 'An artist's saddest ending is to stop advancing.'

All these examples refer to some kind of change which is 'measured' by steps, the basic units of movement with legs. In (30a) the change, which is the building up of the medical and health service network in the countryside, is not complete yet, since it is said to be the 'first step'. In the next example, the change is made 'step by step' as if in a walk. In (30c) two things are changing simultaneously, as if two persons were walking 'at the same step/pace'. In (30d) further change is said to be 'a further step' to take, while in (30e) lacking of positive change is equated to 'stopping taking steps'. The uses of *bu* 'step' in these examples, in one way or another, contribute to the general conceptual metaphor CHANGE IS MOVEMENT. But they are still not all. There are many other uses found common in daily language. The following examples are some compound words containing *bu* 'step':

- (31) a. Shuangbian huitan mai chu le yi da-bu.
 bilateral talks stride out ASP one big-step
 'Bilateral talks made a big step forward.'
- b. Xiandai meishu sheji yi kuo-bu jin
 modern artistic design already broad-step enter
 ru gege shenghuo lingyu.
 into various life realms

'Modern artistic design already entered various realms of life with broad steps.'

- c. Gaige cushi gai chang kuai-bu fazhan.
 reform impel this factory fast-step develop
 'The reform impels this factory to develop with fast steps'

- d. Shengchan zhengzai wen-bu shangsheng.
 production PRT steady-step rise
 'Production is going up with steady steps.'

In all these examples, the compound words containing *bu* 'step' refer to the manner of change. This is apparently projected from our physical or bodily experience to the abstract notion of change of the event structure. When we move with our legs, whether it is walking or running, we usually go faster if the distance between our steps is bigger or broader. We also go faster if our legs move at a faster frequency. Sometimes, however, we tend to lose balance and fall if we go too fast, and therefore we need to keep balance by taking steady and firm steps. There are still more examples such as follows:

- (32) a. Guangdong Sheng gaige-kaifang xian zou yi bu.
 Guangdong Province reform-opening ahead walk one step
 'Guangdong Province is one step ahead in reform and opening (to the outside world).'
- b. Zhongguo he-dian gongye zai gao qi-dian
 China nuclear-power industry PRT high starting-point
 shang mai chu le jianshi de yi bu.
 on stride out PRT solid MOD one step
 'The nuclear power industry of China made a solid step from a high starting point.'
- c. Women gao gaige, taidu yao jiji,
 we make reforms attitude should-be active

buzi yao wen-tuo.
 steps should-be stable-proper
 ‘When we carry out reforms, our attitude should be active, but
 our steps should be stable and proper.’

- d. Huitan mai chu le lishixing zhongyao yi bu.
 talks stride out PRT historical important one step
 ‘The talks made a historically important step forward.’
- e. Zhe shi ‘san-bu-zou’ de fazhan zhanlüe.
 this is three-step-walk MOD development strategy
 ‘This is a “three-step-walk” developmental strategy.’

Here again, ‘steps’, which are basic units of movement with legs, refer to ‘steps of change’ that do not involve actual spatial movement. For instance, *san-bu-zou* ‘three-step-walk’ in (32e) is mapped onto the three developmental stages of the strategy. It is obvious that the whole inference pattern in the domain of moving with legs in space is transferred into reasoning about change in the domain of abstract event structure.

The movement on the land is always affected by the terrain features of the land. For instance, it takes more energy, and therefore it is more difficult, to go uphill than to go downhill. The degree of difficulty in movement is however mapped onto the degree of difficulty in change. When CHANGES ARE MOVEMENTS is compounded with conceptual metaphor THE DESIRED IS UP, we then have the following examples of metaphorical expressions:

- (33) a. Zhejia qiye zhengzai pa dou po.
 this enterprise PRT crawl steep slope
 ‘This enterprise is crawling on a steep slope.’
- b. Ta yi zhihui yu qinfen yi-bu-yi-bu
 she with intelligence and diligence one-step-one-step

de deng-shang le yishu jieti.
MOD mount PRT art stairs.

‘With intelligence and diligence she mounted, step by step, the stairs of art.’

- c. Gai sheng jingji san nian shang le gao lou.
this province economy three year mount PRT high building
‘The economy of this province mounted a high building in three years.’

On the other hand, when CHANGES ARE MOVEMENTS is compounded with THE UNDESIRE IS DOWN, the downhill movement is expected as in the following examples:

- (34) a. Tamen bu yao zai fenliezhuyi de daolu
they not should PRT separatism MOD road
shang jixu hua xia qu.
on continue slip down go
‘They should not slip further down along the road of separatism.’

- b. duo nian lai, Shandong pingguo zhiliang
many years come Shandong apples quality
yi-lu xia hua.
all-the-way downward slip.
‘For many years, the quality of Shandong apples has been slipping down all the way.’

In both of these examples, a change for the worse is conceptualized in terms of downhill movement. (34a) characterizes separatism as movement on a dangerous steep path. The consequence is not specified verbally, but it exists in an image that grows out of the metaphor: If T does not stop slipping, it may lead to a fall into a deep valley or abyss. In (34b) the deterioration of the quality of the apples is understood again as its slipping

downward. As we know from our experience, slipping as a kind of movement usually suggests being out of control. It is very difficult to stop once it starts, and it may lead to a serious and dangerous fall.

A characteristic of movement with legs, i.e. walking, running and jumping, is that it will leave footprints when it takes place on a soft or wet surface. The footprints show the path of movement, which is then mapped onto the 'path of change' since MOVEMENTS ARE CHANGES. Look at the following two examples:

- (35) a. Zhe shi gaigezhe kaituo qianjin de zhuji.
 these are reformers open-up go-forward MOD footprints
 'These are the footprints of the reformers opening up and going forward.'
- b. Gongheguo de Zhuji
 Republic MOD footprints
 'The Republic's Footprints'

The 'footprints' in (35a) are mapped onto the things the reformers have done in making the change happen. (35b) is the title of a series of reports on some of the major achievements and accomplishments China has attained before its 45th anniversary. In either case, the 'footprints' record the past.

The movement with legs is the basic form of movement on the land, but it is by no means the only form. The examples below illustrate two other forms of movement that are mapped onto the conceptions of change:

- (36) a. Gai xian jianshe shi ru fazhan kuai-che dao.
 this county construction drive into develop fast-vehicle lane
 'This county's construction has driven into the fast lane of development.'
- b. Yingguo zen neng qiang da shang Ya-Tai

Britain how can hurry get onto Asian-Pacific
 jingji fazhan de kuai che.
 economic development MOD express train/bus
 'How can Britain catch the express train/bus of the economic
 development in the Asian-Pacific region.'

- c. Tamen chongxin qi-dong jingji fazhan
 they again start-motion economic development
 de kuai-shu lieche.
 MOD fast-speed train
 'They restarted the fast train of economic development.'

In (36a) an automobile is mapped onto 'the construction' which has changed into and is running in the fast lane. As in (36b), *che* in Chinese is a generic-level term meaning 'vehicle (running on the ground)'. The compound *kuai che* can mean either 'express bus' or 'express train'. It is mapped onto 'the economy', with its speed of movement mapped onto the speed of the economic development in the Asian-Pacific region. 'The fast train' in (36c) has undergone a similar mapping.

The concept of change is also expressed as movement on the water. This is illustrated by the following two examples:

- (37) a. Ta chongxin yang qi shenghuo de feng-fan.
 she again hoist up life MOD wind-sail
 'She again hoisted the sail of life.'
- b. Deng Xiaoping tongzhi zhan zai chaoliu de
 Deng Xiaoping comrade stand PRT trend MOD
 qiantou, zhiyin zhe Zhongguo de xiandaihua
 front chart PRT China MOD modernization
 shiye po lang qian-jin.
 cause plough waves advance
 'Comrade Deng Xiaoping is standing at the front of the trend,
 charting China's cause of modernization ploughing through the
 waves.'

In (a) a change in the person's attitude toward life, i.e. the 'hoisting of the sail', brings about a change in her confidence or motivation for life, the energy provided by the hoisted 'sail'. The person, in this case, is 'a sailing boat' or 'a junk'. In (b) Deng Xiaoping is said to be 'charting China's cause of modernization', the ship that is 'ploughing through the waves'.

Now I turn to movement in the air. Generally, movement in the air, namely to fly, usually with wings, is taken as faster than movement on the land or on the water, although this may not be a necessary case in reality. This fact is manifested in our metaphorical conceptualization of change in terms of movement, which in turn is reflected in our language use: fast change is often said to be flying. Therefore, examples such as the following are very common.

- (38) a. Jingji zai qifei.
 economy PRT take-off
 'The economy is taking off.'
- b. Jingji zai teng-fei.
 economy PRT soar-fly
 'The economy is soaring and flying.'
- c. Jingji zai fei-yue.
 economy PRT fly-leap
 'The economy is flying and leaping.'
- d. Jingji zai tu-fei-meng-jin.
 economy PRT vigorous-fly-energetic-advance
 'The economy is flying vigorously and advancing energetically/The economy is advancing by leaps and bounds.'
- e. Women-de shiye zai fen-fei.
 our cause PRT vigorous-fly

‘Our cause is flying vigorously.’

- f. Gongsì aoxiang zai shiyong ke-ji
 company hover at practical science-technology
 de guangkuo kongjian.
 MOD vast space
 ‘The company is hovering in the vast space of practical science
 and technology.’
- g. Gai shi gongye lüyouye liang-yi-qi-fei.
 this city industry tourism two-wings-together-fly
 ‘This city is flying with both wings--industry and tourism.’

Note that the FLYING metaphor is consistent with the generic-level mapping THE DESIRED IS UP. In (38g), industry and tourism serve as wings with which the city’s economy is flying. In other words, they are the causal factors or necessary conditions for the city’s economy to fly. This is because, according to our folk theories, the wings of a bird or plane are what make them able to fly. It is further exemplified by the following:

- (39) a. Shi-wu nian gaige gei jixie gongye
 fifteen years reform to engineering industry
 teng-fei cha-shang shuang yi.
 soar-fly insert both wings
 ‘Fifteen years’ reform inserted two wings into the engineering
 industry (for it to fly)/Fifteen years’ reform provided the
 engineering industry with two wings to fly.’
- b. Gao-xin jishu gei gongsì cha-shang le
 high-new technology to company insert ASP
 fen-fei de chibang.
 vigorous-fly MOD wings
 ‘The high and new technology inserted wings for vigorous
 flight into the company/The high and new technology
 provided the company with wings for vigorous flight.’

As mentioned earlier, the movement-in-the-air metaphor in the above examples are consistent with the conceptual mapping THE DESIRED IS UP. Therefore, we speak of rapid economic growth as the economy taking off and soaring and flying. However, what is up is not always what is desired. For instance, when the economy is growing too fast, it is likely to become ‘overheated’ like the engine of a car. In such a case, it is desirable to have the temperature cool DOWN rather than continue to heat UP. Also, when the economy is growing too fast, inflation is likely to take place and get out of control. To curb the inflation, the growth of the economy has to be slowed DOWN. That is to say, it is more desirable to have a LOW growth than a HIGH one in such a situation. This is illustrated by the following example:

- (40) Zhongguo jingji zhengzai ruan zhuolu, guo-re
 China economy PRT soft land overheated
 de zhuangtai yijing jiang-wen.
 MOD state already lower-temperature
 ‘China’s economy is making a soft landing, and the overheated state
 is cooling down.’

With the overheated economy, a ‘soft landing’, a spatial metaphor, is a desired change.

In the above, I have cited ample linguistic evidence to demonstrate the existence of the conceptual mapping CHANGES ARE MOVEMENTS. All the examples cited so far are based on a single image-schema, namely the SOURCE-PATH-GOAL schema as in Figure 4.5. In addition, as was mentioned earlier, the two versions of Figure 4.2, which present a combination of the CONTAINER schema and the SOURCE-PATH-GOAL schema, structure the two variants of the CHANGES ARE MOVEMENTS

metaphor, i.e. CHANGES ARE MOVEMENTS INTO BOUNDED REGIONS and CHANGES ARE MOVEMENTS OUT OF BOUNDED REGIONS. The two versions of image-schemas and the two variants of conceptual metaphor based on them account for the following two examples respectively:

- (41) a. Guo-you qiye bu ru ping-wen zhengzhang.
state-owned enterprises step into smooth-stable growth
'The state-owned enterprises stepped into a smooth and stable growth.'
- b. Jin nian, nongye fazhan zou chu paihuai.
this year agricultural development walk out-of hesitation
'This year, the agricultural development walked out of hesitation.'

In these two examples, 'a smooth and stable growth' and 'hesitation', which are both states of some sort, are conceptualized in terms of 'bounded regions' or 'locations' schematically as CONTAINERS.

When the two versions of Figure 4.2 are combined into one, again as mentioned previously, we get the image-schema as in Figure 4.6, which provides the schematic basis for the conceptual mapping CHANGES ARE MOVEMENTS INTO AND OUT OF BOUNDED REGIONS. This conceptual metaphor, which projects the image-schema in Figure 4.6 into abstract reasoning about change, covers the following examples.

- (42) a. Liang guo guanxi cong duikang zou
two countries relationship from confrontation walk
xiang hezuo.
toward cooperation
'The relationship between the two countries walked from confrontation to cooperation.'
- b. Zhongguo nongmin zhengzai cong pingkun zou

Chinese peasants PRT from poverty walk
 xiang fuyu.
 toward prosperity
 'Chinese peasants are walking from poverty to prosperity.'

- c. Zhe shi nian zhong, wo guo chanji ren
 these ten years in our country handicapped people
 shiye you kanke zou xiang huihuang.
 undertaking from bumpiness walk toward glory
 'In these ten years, the undertaking for the handicapped in our
 country walked from bumpiness to glory.'

These three examples present cases in which T has changed or is changing from one state (i.e. 'confrontation', 'poverty', and 'bumpiness') into another (i.e. 'cooperation', 'prosperity', and 'glory'). The abstract reasoning about change from one state into another turns out to be spatial reasoning about movement from one location into another.

While the combinations of image-schemas (the PATH and the CONTAINER) in Figure 4.2 and Figure 4.6 are basic in understanding changes into and out of states, there are certainly many other possibilities of combination of these or other image-schemas at work in our metaphorical conceptualization of change. In what follows I will cite some examples to show how some basic image-schemas are functioning in our spatial understanding of nonspatial abstract change. Now consider the following group of examples:

- (43) a. Zai-jian xiangmu diaocha yi
 under-construction projects investigation already
 quan-mian zhan-kai.
 whole-surface spread-open
 'The investigation on the projects under construction has
 spread out to its full-scale.'

- b. Sichuan Sheng jiang bu-duan kuo-zhan shichang
Sichuan Province will unceasingly expand-extend market
lai xiyin gen-duo de wai zi.
so-as-to attract even-more MOD foreign fund
'Sichuan Province will unceasingly expand its market so as to
attract even more foreign funds.'
- c. Touzi guimo zai zhu-bu kuo-da.
investment scale PRT step-by-step expand-large
'The scale of investment is expanding step by step.'
- d. Pu-dong chansheng le juda de juji
Shanghai-east produce PRT huge MOD centripetal
xiaoying he fushe xiaoying.
effect and radiative effect
'East Shanghai produced huge centripetal and radiative
effects.'
- e. Lixiang-zhuyi yintui dao shehui
idealism withdraw-from-view to social
shenghuo de bianyuan.
life MOD periphery
'Idealism withdrew from view/attention and hid to the
periphery of the social life.'
- f. Dangqian gongzuo yao jinjin weirao gaige
at-present work should tight revolve-around reform
yu fazhang liang da zhuti.
and development two big themes
'The work at present should tightly revolve around two major
themes of "reform" and "development".'

The above examples present different abstract ideas, and these abstract ideas are structured spatially by different, but related, image schemas. Let me illustrate them one by one. (43a) is actually structured by two CONTAINER schemas, with one containing the other, as given in Figure 4.7 below:

Figure 4.7. Spread-out as change

The inner circle stands for the ‘investigation’ at its original scale. It is then spread out to its ‘full-scale’ (*quan-mian* ‘whole-surface’). The outer circle represents the boundary of the ‘full-scale investigation’. In this particular case, the notion of change is still conceptualized in terms of movement. But the movement is not linear in one direction, as is the case with the previous examples, but simultaneously in all directions. As a result, the outer CONTAINER contains the inner CONTAINER, as in the figure.

Note that (43b) is structured by the same image-schemas, though it contains some more elements. In this sentence, the word ‘market’ has an abstract sense, different from the more concrete use of the word referring to ‘a bounded location where things are sold’ (e.g. ‘a supermarket’). Schematically, however, this abstract market is still understood as a CONTAINER with its boundary. Our understanding of the above sentence is structured schematically, for instance, as follows:

Figure 4.8. Expansion as change and its consequence

In this figure, the inner circle or CONTAINER stands for the original size/capacity of the market; the outer circle or CONTAINER stands for the size/capacity of the expanded market. It will continue to expand according to the statement. Again, the notion of change is understood metaphorically as movement simultaneously in all directions. Thus, the outer CONTAINER contains the inner CONTAINER, too. Since the expanded CONTAINER is bigger, it has a larger capacity to attract more funds. The difference is schematically demonstrated by the arrowheaded lines, which themselves are the SOURCE-PATH-GOAL schemas, representing funds converging into the CONTAINER(S), the GOAL, from various SOURCES. It is worth mentioning here that one of the FORCE images (Talmy 1985, Johnson 1987), attraction, is also at work in this particular case. The CONTAINER attracts funds like a magnet. Its force is invisible, but it results in visible and spatial consequence: funds move and converge into the CONTAINER.

In (43c), 'scale' is understood spatially as a 'bounded region'. So again the CONTAINER schema comes into play, as illustrated in Figure 4.9.

Figure 4.9. Increasing expansion as change

The image here is similar to the one we see after throwing a rock into a pond. Each circle represents a scale of investment: circle (a) the original one; circle (b) the one after the first-step expansion; and circle (c) the one after the second-step expansion. The ellipsis dots to the right of the outer

circle indicate that there will be more circles as the scale of investment is expanded step by step. Change in this case is still understood as movement, but it moves in all directions simultaneously, that is, it expands.

In (43d), *Pudong*, as a new special economic zone in China, has both centripetal forces and radiative forces. Although the forces are invisible, they lead to spatial consequences, affecting areas outside the CONTAINER. As in Figure 4.10 below, the arrowheaded lines represent the effects of attraction and radiation forces. Attraction will bring about a change within the CONTAINER while radiation will cause a change outside the CONTAINER:

Figure 4.10. Centripetal and radiative forces

(43e), which is about people's mental change, is structured by the following figure:

Figure 4.11. Change from focus to periphery

Here the CONTAINER, which stands for 'the social life', has a central point, It is therefore what is referred to as the FIGURE-GROUND schema. In this

spatial configuration, the central point, which is the 'center of view', is mapped metaphorically onto the abstract 'focus of attention'; the peripheral circle, on the other hand, is mapped onto the abstract 'periphery of attention'. The change of the 'position' of idealism in the social life is represented by the PATH of movement from the center to the periphery. Note that what we are dealing with here is abstract reasoning, but the abstract reasoning is accomplished via a metaphorical version of spatial reasoning.

(43f) is similar to (43e) in certain aspects, and the spatial nature of its understanding is illustrated by the figure below:

Figure 4.12. Cyclic path revolving around a center

As in this figure, the two major themes of 'reform' and 'development' take the central position while the work 'revolves' around them. Therefore, the PATH of movement in this case is not straight as in the previous ones, but cyclic. The image here is that of a wheel, turning around a pivot. The metaphor, which maps the spatial onto the abstract, is based on our everyday experience.

The conceptual metaphor CHANGES ARE MOVEMENTS can be based on a different image-schema, the BALANCE schema. In fact there may be different versions of the BALANCE schema, and given in Figure 4.13 below are two basic versions.

Figure 4.13. Two versions of the BALANCE schema

Here are the vertical balance and horizontal balance. A person, for instance, has to stand straight up to achieve a complete vertical balance. A horizontal balance is achieved on a scale, for instance, by putting the same weights on its both ends. In the following group of examples, change is MOVEMENT OFF BALANCE. That is, either the single-arrowed vertical line tilts to one side and becomes off perpendicular, or the double-arrowed horizontal line slopes to one side and both ends become unlevel, as is illustrated in Figure 4.14 below:

Figure 4.14. Two versions of movement off balance

The examples are as follows:

- (44) a. Shehui de shenmei xuqiu jiju xiang
 society MOD aesthetic needs rapid toward
 ganguan ciji qingxie.
 sensory stimulation tilt
 'The aesthetic needs of society are rapidly tilting toward
 sensory stimulation.'
- b. Zhongguo de touzi quxiang jixu chao
 China MOD investment direction continue toward

zaocheng 'ping-jing' zhiyue de nengyuan he
 cause bottle-neck constraints MOD energy and
 jichu gongye qingxie.
 basic industries slope
 'The direction of China's investment continues sloping to
 energy and basic industries which caused the "bottle-neck"
 constraints.'

- c. Yinhang ba xindai de zhongdian xiang
 bank PRT loan MOD emphasis toward
 jiaotong he nengyuan qingxie.
 transportation and energy tilt
 'The bank tilted the loan emphasis toward transportation and
 energy.'

When, the aesthetic needs of the society 'tilt' toward the sensory stimulation, as in (44a), the latter becomes the favorite among the 'aesthetic consumers'. In (44b), energy and basic industries are favored categories for investment since they have hindered the development of economy. In (44c) energy and transportation are favored by the bank in terms of loan for the same reason. In these examples, the word *qingxie* 'tilt/slope' is used as a verb, either transitive or intransitive. In the following examples, it is used either as a noun or an adjective modifier qualifying a noun or a verb.

- (45) a. Gongchang zai jinzhi, zhufang, jiangli he
 factory PRT promotion housing reward and
 fuli-daiyu deng fangmian xiang ke-ji
 benefits etc. aspects toward science-technology
 renyuan shixing zhengce qingxie.
 personel implement policy tilt
 'In such aspects as promotion, housing, reward and benefits,
 the factory implemented a policy-tilt toward professional
 personnel (i.e. a policy tilted toward, or in favor of
 professional personnel).'

- b. Zhengfu gei yu wai-zi qiye zai
 government give to foreign-funding enterprises PRT
 daikuan shang de qingxie.
 loan on MOD slope
 'The government provided the foreign-funding enterprises
 with a slope (i.e. favor) in loan.'
- c. Gai chang shixing qingxie zhengce.
 this factory implement tilted policy
 'This factory implemented a tilted policy (i.e. policy in favor
 of a group).'
- d. Gai chang xiang jishu qingxie touzi,
 this factory toward technology sloping invest
 tigao le qiye de zhengti suzhi.
 raise ASP enterprise MOD overall quality
 'This factory slopingly (i.e. with favor) invested in
 technology, and raised the overall quality of the enterprise.'

All the examples in (44) and (45) match a spatial concept--movement off balance--with an abstract one--change in favor, as structured schematically by the two versions in Figure 4.14. When a policy is 'tilted', it is in favor of the side it is 'tilted' to. When funding, loan, and investment are sloping, the money will 'roll' to the side they are sloping to. These spatial versions of abstract reasoning are really based on our daily experience. For instance, our bodies tend to tilt toward whatever we like and away from whatever we dislike. Also, when flat surface begins to slope to one side, whatever is upon it will roll to that side.

Sometimes, the game of chess is used as the source domain for metaphorical conceptualization of states, changes, and other aspects of event structure. It can be said that the game of chess itself is a metaphor of battle or war. In a chess game, every move of a piece is a change made out

of an old state and into a new state. It is a change of state resulting from the change of location of a particular piece. In the following are two examples of chess metaphor:

- (46) a. Zai Yunnan jingji fazhan yi pan qi zhong,
 PRT Yunnan economic development one game chess in
 zou de zui piaoliang de yi zhao shi ‘Yun Yan’
 make COM most beautiful MOD one move is Yun Tobacco
 ‘In the chess game of economic development in Yunnan
 Province, the most clever move made is (the production of)
 “Yunnan Tobacco”.’
- b. Ta jue ding ju touzi zhe ke qizi, ba shichang
 he decide raise investment this chess-piece PRT market
 zhe pan qi zou huo.
 this game chess make movable
 ‘He decided to pick up the piece of investment, so as to make
 the chess game of market movable (i.e. in a favorable state).’

In (46a), to produce ‘Yunnan Tobacco’, acceptably the best tobacco in China, is the smartest ‘move’ in the economic ‘game’ in Yunnan Province. In (46b), ‘he’ decided to make the ‘move’ of investment, a move that is likely to bring the whole ‘game’ of market into a favorable situation.

To summarize, this section has examined the conceptual metaphor CHANGES ARE MOVEMENTS (INTO OR OUT OF BOUNDED REGIONS). Essentially, this conceptual metaphor is based on the image-schema or combination of image-schemas in Figure 4.5 and Figure 4.6. It is shown that three kinds of movement, on the land, on the water, and in the air, are all mapped onto change. As human beings, our basic form of movement on the land is to move with our legs, and the basic units of movement with legs are steps. In Chinese, the word *bu* ‘step’ is used extensively in lexicon

to denote stages of change. Other forms of movement on the land, such as by means of automobile or train, are also mapped onto change. As noted, the conceptual metaphor **CHANGES ARE MOVEMENTS** is sometimes combined with another pair: **THE DESIRED IS UP** and **THE UNDESIRED IS DOWN**. Therefore, the desired change is conceptualized as 'upward movement' whereas the undesired change is conceptualized as 'downward movement'. It is understood, based on our experience, that it is more difficult to achieve a desired change than an undesired change since upward movement takes more energy than downward movement. However, it is also shown that the pair of conceptual metaphors **THE DESIRED IS UP** and **THE UNDESIRED IS DOWN** are not absolute. They are instead relative to circumstances. When we are talking about increasing prices, rising inflation rates and overheated economy, for instance, the opposite is true, namely **THE DESIRED IS DOWN** and **THE UNDESIRED IS UP** (see (40) for an example). It is also demonstrated in this section that, while the conceptual metaphor **CHANGES ARE MOVEMENTS (INTO OR OUT OF BOUNDED REGIONS)** is structured basically by the **SOURCE-PATH-GOAL** schema as in Figure 4.5 and its combination with the **CONTAINER** schema as in Figure 4.6, some other combinations of image-schemas are also found underlying this conceptual metaphor. But the number of image-schemas involved is extremely limited: I have only found the **FIGURE-GROUND** schema and the **BALANCE** schema in addition to the **SOURCE-PATH-GOAL** and **CONTAINER** schemas. The variety consists merely in different combinations of recurrent schemas.

4.3.3. Causes

In Chinese, just as in English, causes are understood as forces that control movement (i.e. change) to and from locations (i.e. states). The central conceptual metaphor is:

- (47) CAUSES ARE FORCES (CONTROLLING MOVEMENT TO OR FROM LOCATIONS).

Listed below are some Chinese verbs of causation. They all have a literal spatial sense of movement.

- (48) a. dai-dong (bring-move) 'bring along; give impetus to; drive; spur on; promote'
 b. tui-dong (push-move) 'push forward; promote; give impetus to'
 c. qian-dong (lead-move) 'affect; drive'
 d. qu-dong (drive-move) 'drive; give impetus to'
 e. tui-jin (push-advance) 'push forward; carry forward; advance; give impetus to'
 f. cu-jin (urge-advance) 'promote; advance; accelerate'
 g. cu-shi (urge-send) 'impel; urge; spur on'
 h. qu-shi (drive-send) 'prompt; urge; spur on'

The following three examples illustrate how these causative verbs are used:

- (49) a. Zhaxie zhizhu chanye de xingcheng dai-dong le
 these prop industries MOD formation bring-move ASP
 zhengti jingji de fazhan.
 overall economy MOD development
 'The formation of these prop industries brought into motion (i.e. gave impetus to) the development of the overall economy.'
- b. Meiguo ke-yan yu shengchan jinmi jiehe,
 America scientific-research and production tightly combine
 tui-dong jingji gao-shu fazhan.
 push-move economy high-speed develop

‘In America, scientific research is tightly combined with production, pushing the economy to develop at a high speed.’

- c. Tamen yi ke-ji qu-dong
 they with science-technology drive-move
 waixiang-xing jingji.
 outward-type economy
 ‘They drive the outward-type economy forward with (the
 motive power of) science and technology.’

In (49a), the formation of the ‘prop industries’, i.e. the industries which support the economy like props, is attributed with a causal role in the development of overall economy. The causal role, however, is understood as the source of power that ‘brings the economy into motion’. In (49b), scientific research is also seen as playing a causal function, which is however metaphorized as ‘pushing the economy to develop at a high speed’. In both of these cases, development, a kind of change, is conceptualized in terms of motion in space while causal factors are understood as forces that ‘pull’ or ‘push’ a patient into motion through space. (49c) has a similar metaphorical basis.

Very often, causal factors are not only understood as forces, but expressed lexically as forces as well. For example:

- (50) a. Ta ba buxing bian cheng le zou xiang
 he PRT misfortune turn into PRT walk toward
 huihuang de dongli.
 brilliance MOD motive-force
 ‘He turned the misfortune into the motive force for walking
 toward brilliance.’
- b. Zhongguo jingji qifei de qiangjing
 China economic taking-off MOD strong
 dongli lai zi gaige kaifang

motive-force come from reform open-door
 ‘The strong motive force of the economic taking-off in China
 comes from reform and door-opening.’

- c. Gao-suzhi de ren-cai chengwei qiye
 high-quality MOD human-talents become enterprises
 fazhan de yuandongli.
 development MOD motive-power
 ‘High-quality talents became the motive power of the
 enterprises’ development.’
- d. Ke-ji bei dang zuo tui-dong zhenge
 science-technology PRT regarded as push-move whole
 jingji he shehui fazhan de dongli zhi yuan.
 economy and society develop MOD motive-force MOD source
 ‘Science and technology are regarded as the source of motive
 force pushing the whole economy and society to develop.’

Other compound nouns that are often used metaphorically to refer to causal factors are given below:

- (51) a. qian-dong li (pull-move force) ‘pulling/towing motive force’
 b. tui-dong li (push-move force) ‘pushing motive force’
 c. tuo-zhuai li (haul-drag [against one’s will] force) ‘hindering
 force’
 d. xiyin li (magnetic force) ‘appealing force; attraction’

These represent different kinds of forces. In (51a) the motive force precedes the object moved, such as the train engine, tow truck, tugboat, etc. In (51b) the motive force is behind the object moved, and a typical example of this kind is a bulldozer. (51c) represents a negative force that drags the object moving in one direction to the opposite direction. With (51d), the force may be applied by its source to the object without spatial contiguity

between the two as in the previous cases. Examples of this kind in our daily life include the gravitational force and the magnetic force.

In the previous section of CHANGE, it was shown that change is understood as different forms of movement, such as movement on the land, movement on the water, and movement in the air. The observation actually transfers to this section of CAUSATION, since causation means 'causing to change'. In the following, for instance, different forms of movement are mapped onto the notion of change while causation is understood as some kind of force:

- (52) a. Zhexiang zhengce cushi yinjin Tai zi
 this policy make import Taiwan funds
 gongzuo da-bu xiang-qian.
 work big-step advance
 'This policy made the work of importing funds from Taiwan
 advance with big steps.'
- b. Ke-ji shi pai-tou-bing, zou zai
 science-technology are file-leader-soldier walk at
 gongcheng zhi qian.
 engineering MOD front
 'Science and technology are the file leader soldier, walking
 ahead of engineering.'
- c. Chengshi yi chengwei wo guo shi xiang
 cities already become our country drive toward
 shehuizhuyi xiandaihua de huoche-tou.
 socialist modernization MOD train-head
 'Cities have already become the train engine of our country
 speeding toward the socialist modernization.'
- d. Lingdao ba qiye tui shang le xin fazhan,
 leadership PRT enterprise push onto ASP new development
 da fazhan de guidao.
 big development MOD track

'The leadership pushed the enterprise onto the track of new and great development.'

- e. Zhe yi gaige cuoshi tui-dong le jingji tengfei.
 this one reform measure push-move ASP economy soar
 'This reform measure pushed economy to soar.'

(52a, b) are examples of movement with legs. In (52c, d) the source-domain concept is that of a 'train'. The cities in (c) are the 'engine' which pulls the train, the whole nation, toward the 'destination' of the socialist modernization. In (d) the 'train' is the enterprise that was pushed onto the 'track' of development by its leadership. The reform measure in (52e) is the cause for the fast development of economy. By the cause-as-force metaphor, the measure becomes the 'motive force' that propels economy into a soaring.

Finally, the following three examples illustrate how notions of causation, change, and state are combined into a metaphorical inference pattern in spatial terms.

- (53) a. Xiaoxiao yumiao dai zhe quan chun ren
 tiny fry lead PRT whole village people
 chuang jin le da shichang.
 break into ASP big market
 'The tiny fry led all the people of the village to break into the huge market.'
- b. Lishi, diyuan he ziran tiaojian deng
 history geography and natural conditions etc.
 zhuduo yuanyin ba Xiji tuo ru pingkun.
 many causes PRT Xiji drag into poverty
 'Such causes as historical factors, geographical features, natural conditions, and many others, have dragged Xiji County into poverty.'

- c. Fuchou xinli ba Bingnan pao ru shibai de
 revenge psychology PRT Bingnan toss into failure MOD
 shenyuan, ba Erkui tui shang fanzui daolu.
 abyss PRT Erkui push onto crime road
 'The psychology of revenge tossed Bingnan into the abyss of
 failure, and pushed Erkui onto the road of crimes.'

In (53a), the villagers started the business of raising fry, which made them successful in the competition of market economy. In (53b), historical factors, geographical features, and natural conditions, etc. are seen as the causal factors that made the county poor. In (53c), the psychology of revenge caused one person to be a failure and the other to become a criminal. In terms of semantic role, the causes in these three examples are Agents while the people undergoing change are Patients. Parallel in syntax is the fact that the Agents all take the subject position whereas the Patients are in the object position. The concept of change in these cases is metaphorized as spatial movement of the people forced by the personified causes. Hence, they are respectively 'led to break into the market', 'dragged into poverty', 'tossed into the abyss of failure' or 'pushed onto the road of crimes'. Accordingly, all the states they changed into are understood as locations with physical bounds based on the CONTAINER schema.

This section has studied the conceptual metaphor CAUSES ARE FORCES (CONTROLLING MOVEMENT TO OR FROM LOCATIONS) in Chinese. First, it is noted that, while causes are conceptualized in terms of forces, the Chinese causative verbs usually have a literal sense of causing to move through space. It is also noted that compound nouns denoting various forces are used to refer to various causes. In fact, the conception of

causation is only a natural extension of the spatial conceptualization of states and changes as shown by the specific mappings below:

- (54)
a.	states	-->	locations
b.	changes (n)	-->	movements into or out of locations (states)
c.	change (v)	-->	move into or out of locations (states)
d.	causes (n)	-->	forces causing to move (change) into or out of locations (states)
e.	cause (v)	-->	force/cause to move (change) into or out of locations (states)

As can be seen here, the mappings form the whole inference pattern for the understanding of and reasoning about such abstract concepts as states, changes/change, and causes/causation. Also as seen here, the spatial conceptualization of changes/change as movement(s) is extended from the spatial conceptualization of states as locations, and the spatial conceptualization of causes/causation as force(s) is extended from the spatial conceptualization of both states as locations and changes/change as movement(s). In other words, the mapping between causes and forces is based on the mapping between changes and movements which, in turn, is based on the mapping between states and locations.

Semantically, the theme that undergoes change from one state to another state may have different semantic, or rather metaphorical roles, under different circumstances. As states are understood as locations and changes as movements into or out of locations, the theme undergoing change is an agent that 'moves' from one location into another. With the notion of causation introduced, the agent role is assigned to the causes while the theme undergoing change becomes a patient which is 'forced' by the causes-agent to move from one location into another. It is in such a way

that the conceptualization of such abstract concepts as states, changes/change and causes/causation is achieved via spatial terms. The basic conceptual metaphors are very simple, but they generate a very complex metaphorical system that consists of items in lexicon and expressions at the inferential level.

4.3.4. *Actions*

The generic-level conceptual metaphor for actions is as follows:

(55) ACTIONS ARE SELF-PROPELLED MOVEMENTS.

As a matter of fact, the notion of action is closely related to the notions of change and causation dealt with in the previous sections. People take actions to make changes, and actions they take cause the changes. While both actions and changes are understood as movements, the difference between them should be apparent: actions are always self-propelled movements which may cause other things to move (change), but changes may be, and very often are, movements caused by some external forces (causes) or movements (actions).

Now, consider the group of examples below:

- (56) a. Zhongguo jiakuai xiaomie pingkun bufa.
 China quicken wipe-out poverty steps
 ‘China quickened steps toward wiping out poverty.’
- b. Zhongguo tiao guo mouxie chuantong fazhan
 China jump over some traditional development
 jieduan, jia-da xiandaihua de bufa.
 stages make-bigger modernization MOD steps
 ‘China jumped over some traditional developmental stages, and made bigger steps toward modernization.’

- c. Zhongguo tielu jianshe kaizu-mali, jiu
 China railroad construction put-into-high-gear nine
 da zhongdian gongcheng kuai-shu tui-jin.
 major priority projects fast-speed push-forward
 ‘China put the railroad construction into high gear, and nine
 major priority projects pushed forward at a high speed.’

Here actions are conceptualized in terms of walking or running in (56a, b). In both cases China takes quicker actions, either to wipe out poverty or to realize modernization. In (56c) China takes the strongest actions to construct railroads. The source-domain concept here, however, is an automobile.

Since actions are taken to make changes, their causal effect is, therefore, often expressed metaphorically by transitive verbs denoting movement, such as in the following two examples:

- (57) a. Women yao tui-jin jingji guojihua.
 we should push-forward economy internationalization
 ‘We should push forward the internationalization of economy.’
- b. Zhongguo tui-dong guonei guoji shichang
 China push-move domestic international markets
 jie-gui.
 connect-track
 ‘China propelled the connection between (the track of) the
 domestic market and (the track of) the international market.’

A paraphrase of (a) would be ‘We should take actions to internationalize our economy’, and that of (b) would be ‘China took actions to connect the domestic market with the international market’. Thus, ‘to take actions to change something from one state to another’ is understood as ‘to cause/force something to move from one location to another’.

Since actions are understood as self-propelled movements, an entailment of this conceptual mapping is that ‘starting an action is starting out a path’. Two examples are given below:

- (58) a. Zhongguo Kexueyuan yijing zai shenhua gaige
 Chinese Academy of sciences already PRT deepen reform
 de daolu shang mai-kai le jianshi de bufa.
 MOD road on stride-out ASP firm MOD steps
 ‘The Chinese Academy of Sciences already made firm steps
 along the road of deepening the reform.’
- b. Tianjin qi-dong kua-shiji yu-cai gongcheng.
 Tianjin start-move cross-century cultivate-talents project
 ‘Tianjin City started (moving) the Cross-Century Talents-
 Cultivation Project.’

In (58a), the Chinese Academy of Sciences took firm actions to deepen the reform. The actions, however, are conceptualized as ‘firm steps’ taken along ‘the road of deepening the reform’. The verb *qi-dong* in (58b), literally meaning ‘start-move’, is used especially with a vehicle. For instance, one starts the engine to move an automobile (e.g. *qidong wode che* ‘to start my car’). While the sentence simply means that ‘Tianjin City took action to start the Cross-Century Talents-Cultivation Project’, the movement metaphor, which fundamentally exists at the conceptual level as part of the system of the event structure metaphor, is expressed linguistically by the particular choice of the verb.

Another entailment of the conceptual metaphor ACTIONS ARE SELF-PROPELLED MOVEMENTS is ‘Manner of actions is manner of movements’. Thus, there are following instances:

- (59) a. Beijing jiji wentuo de tui-jin yiliao baoxian

Beijing active safe MOD push-advance health insurance
 zhidu gaige.
 system reform

‘Beijing pushes forward the reform on the system of health insurance actively and safely.’

- b. Tamen zheng yanzhe hongda jihua
 they PRT along great plan
 yi-bu-yige-jiaoyin de qian-jin.
 one-step-one-footprint MOD forward-advance
 ‘They are advancing along the great plan, leaving behind a footprint with each step taken.’

- c. Tamen qiang-xian-yi-bu shengchan xin chanpin.
 they one-step-ahead produce new products
 ‘They produced the new products a step ahead.’

- d. Ying fang gao dan-fangmian tou-bu xingdong.
 British side take one-side steal-step action
 ‘The British side took unilateral sneak-step actions.’

In (59a), Beijing took active and safe actions to reform the system of health insurance. ‘Taking actions to reform something’, however, is conceptualized as ‘pushing forward the reform of something’. It is again a particular instance of linguistic realization of the metaphor at the conceptual level ACTIONS ARE SELF-PROPELLED MOVEMENTS. (59b) is an instance in which ‘a step taken leaves a footprint’. That is to say, the actions taken are producing desired results. The inferential knowledge about walking is now transferred into the domain of reasoning about taking actions. It is but an instance of spatial conceptualization of actions. This conceptualization is further extended by the use of preposition *yanzhe* ‘along’, which schematizes a linear image such as a path. When it is used to take the word ‘plan’ as its object, the linear image of a path or trail

transfers into the understanding of the more abstract notion of ‘plan’. The point here is that this particular metaphorical use of preposition *yanzhe* ‘along’ functions only to reinforce, rather than to create, the more general metaphor at the conceptual level: ACTIONS ARE SELF-PROPELLED MOVEMENTS. (59c) instances spatial conceptualization of time of actions, and different people taking actions to achieve the same goal is understood as in a race. In (59d), unilateral secret actions against the other side are metaphorized as ‘sneak steps’, and therefore regarded as ‘foul plays’, just like the ‘off-side’ in a football game, which should not be allowed in order for the game to go on fairly.

Further examples of ‘Manner of actions is manner of movements’ are given below:

- (60) a. Ta jin-tui-liang-nan, ju-bu-weijian.
 he advance-retreat-both-difficult, lift-step-hard
 ‘He felt it difficult to go forward or backward, and hard to take steps.’
- b. Ta zai xue-bu qianjin, zhengqu
 she PRT learn-stepping advance strive
 mai-chu gen-wen gen-da de bufa.
 stride-out stabler bigger MOD steps
 ‘She is learning stepping (i.e. toddling) forward, striving for stabler and bigger steps.’
- c. Gai gongsi caiqu jiaqiang dui-wai hezuo yu
 this firm adopt strengthening with-outside cooperation and
 zi-chou ziji de ‘liangtiao-tui-zoulu’ de fangzhen.
 self-raising fund MOD two-leg-walk MOD policy
 ‘The firm adopted the “walk-with-both-legs” policy to strengthen the cooperation with the outside and to raise funds by itself.’

- d. Gai gongsi zai shichang jingji de haiyang li,
 this firm PRT market economy MOD ocean in
 xue hui le yong duozhong zishi youyong.
 learn how ASP with various styles swim
 ‘This firm learned how to swim with various styles in the
 ocean of market economy.’

(60a) contains two idiomatic phrases which metaphorize dilemma as difficulty to go forward or backward, and difficulty to take action as difficulty to lift one's feet for steps. (60b) compares the experience of learning to make actions to a baby's experience of learning to walk, i.e. toddling. In (60c), the policy, which is the guide to actions, is called 'walk-with-both-legs' policy, by which to simultaneously explore outside and inside funding is expressed as 'to walk with both legs', i.e. to make balanced actions. Finally, (60d) presents a metaphor in which to explore various potentials or possibilities is understood as 'to swim with various styles'.

This section has examined the aspect of actions in the event structure metaphor. Obviously, this aspect is closely connected to the aspects discussed previously: ACTIONS are consciously taken to CAUSE CHANGES of STATES. Since ACTIONS are consciously taken, they are thus SELF-PROPELLED MOVEMENTS. In fact, consciously-taken actions are a special kind of causes, which will result in changes of states.

4.3.5. *Purposes*

The previous section discusses the conceptual metaphor ACTIONS ARE SELF-PROPELLED MOVEMENTS. Correlated with this metaphor is the mapping in which the purposes of actions are conceptualized as desired

locations, i.e. the places where one wants to go and where one wants to be. The conceptual metaphor here is then:

- (61) PURPOSES/GOALS/OBJECTIVES ARE DESTINATIONS (DESIRED LOCATIONS).

The following are Chinese words for ‘purpose’ and ‘destination’:

- (62) a. mu-di (eye-target) ‘purpose; aim; goal; objective; end’
b. mu-di²-di⁴ (eye-target-location/place) ‘destination’

Obviously, the Chinese word for ‘purpose’ has a primary visual sense: it is ‘the target one’s eyes look or aim at’. The Chinese word for ‘destination’ is actually the combination of ‘purpose’ and ‘location’. So the word literally means ‘the location of one’s purpose’. These two words themselves manifest the connections between the abstract sense of ‘purpose’ and the spatial sense of ‘destination’.

In Chinese, the conceptual metaphor in (61) is reinforced by the use of a particular verb commonly in collocation with *mudi* ‘purpose/goal/objective/aim/end’. The verb is *dadao* ‘achieve/attain’, literally meaning ‘to arrive at’ or ‘to reach’, although in modern Chinese it only takes an abstract noun (such as ‘purpose’) as its object, while the verb with the two syllables reversed in order, i.e. *daoda* ‘reach/arrive at’, collocates with a place noun. Therefore, the following collocation is a very common one:

- (63)

<i>dadao</i>	<i>mudi</i>
arrive at/reach	purpose
‘to achieve/attain the purpose’	

This collocation evidences the metaphorical conceptualization of purpose in terms of spatial location.

Just as *purpose* and *goal/objective/aim* are closely related words in English, so are their counterparts in Chinese. The Chinese word for ‘goal/objective/aim’ is *mu-biao*, literally meaning ‘eye mark/sign’. It also collocates with the verb *dadao*, as in the following:

- (64) *dadao* *mubiao*
 arrive at/reach goal/objective
 ‘to attain/achieve the goal/objective’

Again, the collocation shows that ‘goal/objective’ is metaphorized as desired location in Chinese, just as ‘purpose’.

In the following the examples demonstrate how, at the inferential level, objectives are understood and expressed as destinations toward which one travels.

- (65) a. Zhongguo zheng chaozhe jianli xin tizhi, shixian
 China PRT toward build new system realize
 xiandaihua de mubiao qianjin.
 modernization MOD goal advance
 ‘China is advancing toward the goal of building up a new
 system and realizing modernization.’
- b. An-Gang zheng ju-bu xiang nian chan yi-qian-wan
 An-Gang PRT lift-step toward annual produce ten-million
 dun gang de mubiao maijin.
 tons steel MOD goal stride
 ‘Anshan Iron and Steel Company is striding toward the goal of
 annual production of ten million tons of steel.’
- c. Ta jian-ren-bu-ba de chao ziji de yishu
 he firm-and-indomitable MOD toward self MOD artistic
 mubiao maijin.

goal stride
 'Firmly and indomitably, he is striding toward his own artistic goal.'

The goals in these three examples are respectively for the whole country, for an enterprise, and for an individual. But the spatialization of the abstract notion of goal achievement is the same in each case.

The following three examples reveal different aspects of the inference pattern for the purpose/goal-destination metaphor.

- (66) a. Ta you ma-bu-ting-ti de ben xiang xia yige
 he again horse-not-stop-hoofs MOD gallop toward next one
 mubiao le.
 goal PRT
 'With no pause, he was again galloping toward the next goal.'
- b. Gaizhao zuifan de mubiao you xiangqian yanshen
 reform criminals MOD goal again forward extend
 le yi bu -- kaifa fanren zhili ku.
 ASP one step -- open up prisoners intelligence storehouse
 'The goal for reforming criminals is again extended a step
 further -- to open up the intelligence storehouse of prisoners.'
- c. Tamen zheng kuai-bu zou xiang xiaokang,
 they PRT quick-step walk toward being-comfortably-off
 ju xiaokang shenghuo yi
 distance comparatively well-off life already
 bu yaoyuan.
 not far away
 'They are walking toward being comfortably off quickly,
 already not very far away from a comparatively well-off life.'

A particular goal may be ultimate or intermediate. An intermediate goal is like a bus stop between the terminals. The subject in (66a) has passed one intermediate goal and is moving to reach the next goal. A goal can be

defined and redefined just as a bus stop can be located and relocated. The more difficult a goal is to achieve, the further away it is from the traveler. This is in part illustrated in (66b). The destination in space is such that one is getting closer to it when moving toward it. This is what (66c) exemplifies.

As a matter of fact, purposes/goals/objectives all represent states in some sense: they are desired states. Therefore, while states are locations, purposes/goals/objectives are DESIRED locations. That is, they are locations where one wants to go or wants to be.

- (67) a. Ouzhou zhubu zou xiang heping yu wending.
Europe step-by-step walk toward peace and stability
'Europe is walking step by step toward peace and stability.'
- b. Zhangjiagang mai xiang xiandai gongye gang cheng.
Zhangjiagang stride toward modern industrial port city
'Zhangjiagang is striding toward a modern industrial port city.'

Sometimes, the desired location is the top of a mountain. This is because the PURPOSE-AS-DESTINATION metaphor is interacting with the DESIRED IS UP metaphor. The interaction results in the following examples:

- (68) a. Women yao nuli pandeng ke-ji gao
we should try-hard climb science-technology high
feng, gan chao shijie xianjin shuiping.
peak catch surpass world advanced level
'We should try hard to climb up the peak of science and technology, and catch up and surpass the world advanced level.'
- b. Ta zai xiang gao ke-ji de dianfeng dengpan.
he PRT toward high science-technology MOD summit climb
'He is climbing toward the summit of high technology.'

- c. Shijie guanjun bingfei gao-bu-ke-pan, zhi-yao
 world championship not too-high-to-climb as-long-as
 zi-qiang-bu-xi, jiu neng zuizhong daoda
 make-unceasing-efforts then can eventually reach
 guanghui de dingdian.
 brilliant MOD summit
 'The world championship is not too high (for them) to climb,
 and as long as they make unceasing efforts, they can eventually
 reach the brilliant summit.'

In (68c) the world championship is compared to the zenith of a mountain or a mountain range, which is the highest point and most difficult to get to for climbers. It is the destination, the desired location, for the climbers.

Obviously, the image-schema underlying all these examples is the SOURCE-PATH-GOAL schema, composed of two points, the source and the goal, connected by a line, the path. The following two examples highlight both points while in those previous ones only the point of goal is mentioned:

- (69) a. Yishu de zhuiqiu zhi you qi-dian
 artistic MOD pursuit only have starting-point
 er wu zhong-dian.
 but no end-point
 'There is only the starting point but no end point in the pursuit
 of art.'
- b. Quan-xin-quan-yi wei renmin fuwu shi women Dang
 whole-heart-whole-sole for people serve be our Party
 yiqie huodong de chufa dian he guisu.
 all activities MOD departure point and home-to-return-to
 'To serve people whole-heartedly is the departure point as well
 as the destination of all the activities of our Party.'

The following two examples specify the path in addition to the goal:

- (70) a. Tamen liang zhi-tong-dao-he.
 they two goal-same-path-common
 'They both have the same goal and common path.'
- b. Xin li you le mubiao, di shang jiu you le lu.
 heart in have ASP goal ground on then have ASP path
 'When there is a goal in the heart, then there will be a path
 (leading to that goal) on the ground.'

(70a) contains a set phrase describing people who have common ideals or ambitions. People who have common goals take the same path: they move together in the same direction. (70b) emphasizes the importance of a goal: when you set up a goal, you will then find a path to reach that goal. The spatialization of abstract reasoning is obvious, and it is doubtful that it can be achieved otherwise.

This section has discussed the operation of the conceptual metaphor PURPOSES/GOALS/OBJECTIVES ARE DESTINATIONS in Chinese. It is noted that this aspect of the event structure is closely related to the ones discussed previously. Purposes/goals/objectives are actually special kinds of state, namely, they are desired states attained usually after sufficient actions (efforts) are taken. In terms of spatial metaphor, therefore, purposes/goals/objectives are DESIRED locations where one wants to go, i.e. destinations. Purposes/goals/objectives (destinations) are reached when changes (movements) have taken place as a result of actions (self-propelled movements).

4.3.6. Means

Means, as method(s) of doing things or making actions to achieve certain purposes/goals/objectives, are conceptualized metaphorically as paths, and the conceptual metaphor in this case is:

(71) MEANS ARE PATHS (TO DESTINATIONS).

In Chinese, the words for ‘means’, it is interesting to note, either contain one of the following words or consist of two of them (from Wu 1981):

- (72)
a.	lu	1) road, path, way; 2) way; means
b.	tu	1) way, road, route
c.	jing	1) footpath, path, track; 2) way; means
d.	dao	1) road, way, path; 2) way, method
e.	men	1) door, gate, entrance; 2) way to do sth., knack

The Chinese words for ‘means’ are really numerous in number, although they may differ in shades of meaning and in usage. Given below are some examples:

- (73)
a.	lu-zi (road/path/way-suffix) ‘method; approach; way’
b.	lu-jing (road/path/way-footpath/path/track) ‘method; ways and means’
c.	lu-dao (road/path/way-road/way/path) ‘way; approach; method’
d.	lu-shu (road/path/way-number) ‘method; approach; way’
e.	dao-lu (road/way/path-road/path/way) ‘approach; path; way’
f.	dao-dao (road/way/path-road/way/path) ‘way; method’
g.	tu-jing (way/road/route-footpath/path/track) ‘way; channel’
h.	men-jing (door/gate/entrance-footpath/path/track) ‘way; method’
i.	xi-jing (footpath-footpath/path/track) ‘path; way’
j.	men-lu (door/gate/entrance-road/path/way) ‘knack; way’
k.	men-dao (door/gate/entrance-road/way/path) ‘way to do sth.; knack’

Particularly notable is the use of 'door/gate' in some of these compound words. The conception behind it is apparent: whenever people want to get INTO a closed container, they need not only a path leading to it, but also an entrance, i.e. a door or gate. The following words further illustrate the metaphorical use of *men* 'door/gate':

- (74) a. ru-men (enter-door/gate) 'learn the rudiments of a subject; elementary course; ABC'
 b. mei-men (no-door/gate) 'have no means of doing sth.; have no access to sth.; no chance; (of sth.) impossible'

In fact, there are many more Chinese compound words or idiomatic phrases that contain the words in (72) above, used in an abstract metaphorical sense to mean 'means/method/approach' of doing things. These are some examples:

- (75) a. zou zheng-lu/dao (walk right-road) 'to take the (morally) right way (to one's goal)'
 b. zou xie-lu/dao (walk evil-road) 'to take to evil ways; abandon oneself to evil ways; to lead a depraved life'
 c. wai-men-xie-dao (crooked-door-evil-road) 'crooked means or ways; dishonest methods or practices'
 d. xie-men-wai-dao (evil-door-crooked road) 'crooked means or ways; dishonest methods or practices'
 e. zou hou-men (walk back-door) 'to get sth. done through pull'
 f. zou lao-lu (walk old-road) 'to follow the beaten track; to slip back into the old rut'
 g. zou wan-lu (walk roundabout-way) 'to take a roundabout way (to one's goal) undesirably'
 h. zou jin-lu (walk short-road) 'to take a shortcut (to one's goal)'
 i. zou jie-jing (walk quick-footpath) 'to take a shortcut (to one's goal)'
 j. bi-you-zhi-lu (must-follow-MOD-road) 'the only way (to achieve a goal)'
 k. si-lu (dead-road) 'dead end; blind alley'
 l. si-hutong (dead-alley) 'dead end; blind alley'

- m. wu ru qi-tu (mistake into wrong-way) 'take the wrong way by mistake; go astray'

All these words or phrases are instances of manifestation of the conceptual metaphor MEANS ARE PATHS (TO DESTINATIONS). In the following are some examples of sentences:

- (76) a. Tongzhou kaifa xin jishu chuang xin lu.
Tongzhou open-up new technology break new road
'Tongzhou opened up new technology to break a new path.'
- b. Tamen zhao wenti, cha yuanyin, xunqiu
they try-to-find-out problems check causes seek
baituo kunjing de luzi.
break-out predicament MOD path
'They tried to find out problems and causes, seeking for a path to break out of the predicament.'
- c. Xifang qi guo shounao huiwu xunqiu zou chu
Western seven countries summit meeting seek walk out
jingji di gu de chu lu.
economic low valley MOD out way
'The summit meeting of the seven Western countries sought for a way (out) to walk out of the economic valley.'

Here the words 'path' or 'way' refers to the means, method or approach for achieving some purposes. Their metaphorical senses are obvious.

At the inferential level, in fact, many more source-domain concepts are mapped onto the target-domain concept of means. In the conceptual metaphor MEANS ARE PATHS, the concept 'path' is at the superordinate level, and there are various kinds of paths at the basic level. The railroad track is one of those basic-level concepts under the superordinate-level concept of paths. For example:

- (77) a. Zhongguo jiaoyu zhujian zou shang fazhi guidao.
 China education gradually walk onto legal track
 'China's education is gradually walking onto the legal track
 (i.e. more and more governed by law).'
- b. Gai daxue jin-nian jiang shixing zi-fei
 this university this-year will put-into-practice self-payment
 yu gong-fei bing gui.
 and state-payment merge tracks
 'This university will implement the practice of emerging the
 two tracks (i.e. to have double tracks) of self-payment and
 state-payment this year.'
- c. Guo-you qiye yu-dao le you jihua
 state-owned enterprises come-across ASP from planned
 jingji xiang shichang jingji zhuan gui guochen
 economy to market economy shift track process
 zhong de maodun he kunnan.
 in MOD contradictions and difficulties
 'State-owned enterprises came across the contradictions and
 difficulties in the process of shifting from the track of planned
 economy to the track of market economy.'

In (77a) China started to build up a legal system for its education to run upon. Apparently it is an instance of mixed metaphor in which 'walk onto the track' mixes two source domains into one expression. But instances of this kind of mixed metaphor are not rare. Now, consider the following two examples:

- (78) a. Wo-guo lüyouye zhengzai shi ru fazhan de
 our-country tourism PRT drive into development MOD
 kuai che dao.
 fast vehicle lane
 'The tourism of our country is driving into the fast lane of
 development.'
- b. Hunan nongye bu ru kuai che dao.

Hunan agriculture step into fast vehicle lane
 ‘Agriculture in Hunan Province stepped into the fast lane.’

- c. Xiang-zhen qiye kuai che dao shang
 village-township enterprises fast vehicle lane on
 zai jia-bian.
 still lash-with-whip
 ‘(Though already) on the fast lane, village and township
 enterprises are still trying to speed up with a whip.’

Here, all three examples refer to the fast speed of development or change. (78a) is not an instance of mixed metaphor since the use of the verb *drive* is consistent with the notion of ‘fast traffic lane’, i.e. the lane for faster vehicles. However, both (78b) and (78c) are examples of mixed metaphor. In (78b) the verb *bu* ‘step’, which is associated with walking of legged animals, especially humans, is obviously incompatible with *kuai che dao* ‘fast traffic lane’, which entails wheeled vehicles. (78c) is an instance of metaphor which mixes an automobile and a horse. It is common sense that automobiles rather than horses run on the fast traffic lane and that they are accelerated not by ‘lashing them with a whip’. It has been long since horse was the main means of transportation. But the notion of ‘lashing with a whip’ has been conventionalized into language and preserved as meaning ‘accelerate at the top speed’. Similar examples of mixed metaphors are found not very unusual. This phenomenon may be instances of ‘duality’ discussed by Lakoff (1993a, 1993b, 1994). Mappings at different levels may mix different kinds of metaphor into a single expression.

In the following two examples, the kind of ‘paths’ that is mapped onto ‘means’ is the highway, which is very common in the United States but is still something new in mainland China.

- (79) a. Tongxin shi jingji zhengzhang he shehui
communications are economy growth and society
jinbu de gao-shu-gonglu.
progress MOD high-speed-road
'Communications are highways for economic growth and
social progress.'
- b. Gongzhong xinxi wang de jiancheng yunxing,
public information network MOD construction operation
wei Zhuhai zhu qi le yitiao 'xinxi gao-shu-gonglu'.
for Zhuhai build up ASP one information high-speed-road
'The construction and operation of the public information
network have built up a "information highway" for Zhuhai.'

Both examples highlight the advanced communicative and informational technology as important and effective means for development and growth. The mapping of the high-speed movement on the highway onto the quickness and effectiveness of modern communicative and informational technology seems to be unique, but it is only a particular instance of realization of the general conceptual metaphor MEANS ARE PATHS, which is, in turn, a particular aspect of the central Event Structure Metaphor.

By inferential extension, there are other source-domain concepts that are mapped onto the target-domain concept of means. For instance:

- (80) a. Jiu-nian-lai, women nuli ba baozhi ban cheng
nine-years-come we try-hard PRT newspaper run as
'shijie liaojie Zhongguo de chuankou, Zhongguo
world understand China MOD window China
zou xiang shijie de qiaoliang'.
walk toward world MOD bridge
'In the past nine years, we have tried hard to run the
newspaper as "the window through which the world
understands China, and the bridge over which China walks
toward the world".'

- b. Women ying xunshu datong chanping
 we should quickly get-through products
 jin ru guoji shichang de tongdao.
 enter into international market MOD passage
 'We should quickly get through the passage for the products to enter the international market.'
- c. Ta liyong yiqie jihui qu xunzhao
 he make-use-of all chances to seek-for
 neng deng-shang yishu diantang de jieti.
 can mount art palace MOD stairs
 'He made use of all chances to seek for the stairs to mount the artistic palace.'

In (80a) the 'bridge' is a special kind of path that cross over waters. The 'passage' in (80b) is the kind of path that leads into a enclosed area. The 'stairs' in (80c) is again a special kind of path ascending to a higher position. Each mapping is a match fit into its context, but all of them reduce to instances of the general conceptual metaphor MEANS ARE PATHS (TO DESTINATIONS).

Another instance of the path metaphor is illustrated in the following sentences in which the source-domain concept is *tiaoban*, which means either 'gangplank' or 'springboard':

- (81) a. Tamen ba zai guoji shichang
 they PRT PRT international market
 shang zhanyou juegui youshi de chanpin
 on occupy absolute dominance MOD product
 zuowei ben fuyu de tiaoban.
 taken-as go-to richness MOD gangplank
 'They take the products that occupy an absolutely dominant position in the international market as the gangplank leading to prosperity.'

- b. Tamen ba Aomen dang zuo Putaoya jin
 they PRT Macao taken as Portugal enter
 ru Zhongguo shichang de shangye tiaoban.
 into Chinese market MOD bussiness gangplank
 ‘They take Macao as the bussiness gangplank for Purtugal to
 enter Chinese market.’
- c. Tamen ba lianhe-qiye dang tiaoban, you ci tiao
 they PRT joint-enterprise taken-as springboard from it jump
 jin yanhai de jingji tixi, canyu guo nei
 into coastal MOD economy system participate-in nation inside
 wai shichang de jinzheng.
 outside market MOD competition
 ‘They take the joint enterprise as a springboard, by which to
 jump into the coastal economic system, so as to participate in
 the competition in the domestic and international markets.’

In all three cases, the gangplank and springboard are really means to some end. While the metaphorical expressions sound fresh, they reside actually inside the conceptual metaphor MEANS ARE PATHS (TO DESTINATIONS).

A special kind of the path metaphor has the source-domain concept of *qudao*, which literally means ‘irrigation ditch’ or ‘channel’ in Chinese. This path metaphor is special in that *qudao* ‘irrigation ditch/channel’ is the path for water. Usually, this source-domain concept is used in certain target domains. Look at the following examples:

- (82) a. Tianjin duo-qudao de jiejie chengshi
 Tianjin multi-channel MOD solve urban
 huanjing wenti.
 environmental problems
 ‘Tianjin City solves urban environmental problems through
 multiple channels.’
- b. Hainan de haiwai xiaoshou qudao
 Hainan MOD overseas marketing channels
 bu chang, nongye pin hen

not unimpeded agricultural products very
 nan da jin guoji shichang.
 difficult break into international market

‘The overseas marketing channels of Hainan Province are not unimpeded, so it is very difficult for its agricultural products to break into the international market.’

- c. Zhejia qiye wei jilei zijin tuokuan le qudao.
 this enterprise for accumulate fund widen ASP channel
 ‘This enterprise widened the channel for accumulating funds.’

- d. Tamen jue ding wei liang guo zhijian
 they decide for two countries between
 de xueshu wenhua jiaoliu ianli qudao.
 MOD academic cultural exchange build channels
 ‘They decided to build channels for the academic and cultural exchange between the two countries.’

As in (82a), ‘multiple channels’ simply means ‘multiple methods/approaches’. Typically, however, the source-domain concept of channel is used in these target domains: the marketing goods as in (82b); the circulation of currency or funding as in (82c); and the communication of ideas as in (82d). This is because goods, currency or funds, and ideas share a common feature: they are all understood as liquids. In the following collocations, for instance,

- (83) a. huobi liu-tong (currency/money flow-through) ‘circulation of currency/money’
 b. shangpin liu-tong (commodities flow-through) ‘circulation of commodities’
 c. zijin liu-shi (funds flow-lose) ‘drain on funds’
 d. zijin wai-liu (funds out-flow) ‘outflow of funds’
 e. sixiang jiao-liu (thoughts/ideas mutual-flow) ‘interflow/communication of thoughts/ideas’

one word or morpheme that is in each of them is *liu* 'flow', which primarily refers to the movement of liquids. Here exists a linkage of relations:

- (84) a. Means are paths.
 b. Channels are paths for liquids.
 c. Goods/commodities, currency/funds, and ideas/thoughts are liquids.

The metaphors in (a) and (c), linked by the non-metaphorical statement in (b), sanctions the use of 'channel' as source-domain concept in (82b-d).

Note that (82d) reminds of the so-called conduit metaphor, which is very pervasive in English (see Reddy 1993). In the conduit metaphor, ideas or thoughts, packed in linguistic expressions, go through a pipe in communication, and the following sentence is such an example:

- (85) Youguan yijian he konggao de tousu
 relevant criticisms and complaints MOD lodging
 guandao jiang genwei shun-chang.
 pipe will more smooth-unimpeded
 'The pipe for lodging relevant criticisms and complaints will be more smooth and unimpeded.'

The pipe is also a kind of path, the path for liquid or gas. So this example is an instance of the path metaphor in which the 'pipe' is mapped onto the target concept of means in the Event Structure Metaphor.

To conclude this section, it can be said that evidence for the existence of the conceptual metaphor MEANS ARE PATHS (TO DESTINATIONS) is strong in Chinese. The evidence exists in both lexicon and inference pattern. In lexicon, as cited, quite a number of words meaning 'means' or related senses either contain or consist of morphemes

with a literal meaning of ‘road/way/path’ or ‘door/gate/entrance’. In the inferential level, as already indicated, some more source-domain concepts are mapped onto the target-domain concept of means. Since MEANS ARE PATHS is a metaphor at the conceptual rather than linguistic level, the generic concept of path has various specific-level concepts mapped onto the target concept of means. They include railroad track, highway, bridge, passage, stairs, gangplank, springboard, channel, pipe, as well as road, way, footpath, and door/gate, as instanced in this section. Sometimes, the path metaphor also interacts with other metaphors to produce more intricate network effects, such as in those ‘channel’ examples cited in this section.

The relations of the conceptual metaphor MEANS ARE PATHS with the ones discussed previously in this chapter are obvious. Paths (means) are paths for movements (changes) of something caused by external forces (causes). Or they may be paths for self-propelled movements (actions) toward some destinations (purposes/goals/objectives). On the one end of the path is the starting-point location (the original state) while on the other end is the new location (the new state) or the destination (the purpose/goal/objective). The inference pattern of the spatial, physical world is transferred in whole into the abstract domain of event structure.

4.3.7. Difficulties

As an aspect of the Event Structure Metaphor, the conceptual metaphor for difficulties is as follows:

(86) DIFFICULTIES ARE IMPEDIMENTS TO MOTION.

Here, ‘motion’ refers to the movements, which are actions taken or changes made, toward the destinations, which are one’s purposes/goals/objectives.

Difficulties as impediments may take the form of forces, i.e. counterforces, as illustrated by the following lexical item, which is mapped from a physical sense in (1) onto a more abstract sense related to difficulty or problem:

- (87) zu-li (resisting-force)
1. resistance; drag
 - a. kongqi zuli ‘air resistance’
 - b. moca zuli ‘friction drag’
 2. obstruction; resistance
 - a. qianjin de zuli ‘resistance to advance/progress’
 - b. fazhan de zuli ‘obstruction to development’

The more abstract sense of *zuli*, as in (2), is exemplified by the following sentence:

- (88) Nongye wenhua zaocheng guannian-shang de fengbi,
 agricultural culture create concept-on MOD closeness
 baoshou deng, dou shi fazhan de zuli.
 conservativeness etc. all be development MOD obstructions
 ‘The conceptual closeness and conservativeness , and so forth,
 created by the agricultural culture, are all obstructions to
 development.’

Difficulties or problems as impediments to motion may also take the form of objects. Given below are some lexical items, which literally refer to impediments to motion in the physical world but have transferred to the more abstract domain via the difficulty-as-impediment metaphor:

- (89) a. zhang’ai ‘obstacle; obstruction; barrier; impediment’
 b. zu’ai ‘block/blockage; obstruct/obstruction;
 impede/impediment; hinder/hindrance’

- c. nan-guan (difficult-pass/fortress) 'difficulty; problem'
- d. lan-lu hu (blocking-road tiger) 'obstacle; stumbling block'
- e. ban-jiao shi (tripping-feet stone) 'stumbling block; obstacle'

These can be seen as examples of difficulties as blockages. In the following I will show how they are used metaphorically in the target domain of abstract reasoning. Here are two examples of (89a):

- (90) a. Women yao paichu Xianggang pingwen
 we should remove Hong Kong smooth
 guodu daolu shang de renhe zhang'ai.
 transition road on MOD any obstacles
 'We should remove any obstacles on the road of Hong Kong's
 smooth transition.'
- b. Ru-qing-ru-li de fengxi zhujian xiaochu le
 into-sens-into-reason MOD analysis gradually clear-up ASP
 zhege nü daxuesheng de sixiang zhang'ai.
 this female college-student MOD mind obstacles
 'The fair and reasonable analysis gradually cleared up this
 female college student's mental obstacles.'

The Chinese government will take over Hong Kong in 1997. The transition from the present British administration to the Chinese one then is conceptualized, as in (90a), as a road on which there are obstacles, i.e. difficulties and problems, that have to be removed in order to make the road of transition smooth. In (90b) the obstacles are mental, i.e. exist in one's mind. The conceptualization is that there are paths in the mind, on which ideas or thoughts travel to reach certain goal when one is thinking or reasoning. When mental obstacles, i.e. problems, occur and block the paths, one is not capable of thinking or reasoning any more. The mind does not function well unless the blockage is removed. This is evidenced by the

commonly used Chinese word *si-lu* ‘train of thought/thinking’, which literally means ‘thinking route’. Two examples are given below to illustrate the point:

- (91) a. Waimian de caoza sheng daduan le tade si-lu.
outside MOD noisy sound break ASP her thinking-route
‘The noisy sound outside broke her train of thought.’
- b. Tade si-lu hen qingchu.
her thinking-route very clear
‘She thinks very clearly.’

Now, consider the following two sentences containing *zu'ai* ‘block’ of (89b).

- (92) a. Ruguo bu xia-juexin jiejie zhaxie wenti, jiu you
if not make-a-resolution solve these problems then have
keneng zu'ai shiye de jin-yi-bu fazhan.
possibility block cause MOD further development
‘If (we) don’t make a resolution to solve these problems, then there is a possibility that (they) will block the further development of our cause.’
- b. Tamen fabiao yanlun, zu'ai gao-ceng huitan de jinxing.
they express opinions block high-level talks MOD go-on
‘They expressed their opinions, blocking high-level talks.’

As in (92a), a cause in the sense of a group of people’s common goal/objective is understood as a journey to a destination. The problems, if unsolved, will keep us from moving toward our destination like obstacles or barriers. In (92b), the opinions expressed have forces, just like air resistance or friction drag, which will keep the high-level talks from moving on its course. Talks are also understood as journeys since they are held to reach certain goals or objectives.

In (89c) *guan* refers to ‘a strategic pass/fortress’ in the physical world, and ‘a difficulty/problem’ in an abstract sense. The following are some examples with the word *guan* ‘pass/problem’, which are respectively a compound word, a phrase, and a sentence.

- (93) a. gong guan
 attack/storm pass/fortress
 ‘to attack/storm a strategic pass/fortress’ / ‘to tackle key problems’
- b. du guo nan guan
 cross over difficult pass
 ‘to tide over a difficulty’
- c. Ta zai kexue de daolu shang gongke le yige-you-yige
 he PRT science MOD road on capture ASP one-after-another
 nan guan, dadao shijie lingxian shuiping.
 difficult fortress reach world leading level
 ‘He captured one after another fortress (i.e. broke down one after another barrier/resolved one after another key problem) along the scientific road, and reached the advanced level in the world.’

Of these examples, (a) has obtained an abstract sense while keeping its physical sense. (b) has completely transferred into the abstract domain, though traces of origin are apparent in the physical domain. (c) is an example revealing the inference pattern transferred from the physical world to the abstract domain. Scientific endeavor is conceptualized as a military journey along which are enemy’s fortresses. One either captures these fortresses one after another and reaches the destination, or fails to do so with fortresses blocking the way. In this sense, difficulties/problems, understood as strategic passes/fortresses, have a blocking function, impeding one’s forward movement toward the destination.

As for *lan-lu hu* ‘blocking-road tiger’ in (89d), it used to refer to gangsters and bandits who block the road and rob people, but now refers to difficulties/obstacles that impede one’s progress/motion to one’s goal/destination. (89e) has the same metaphorically extended meaning, and the following is an example.

- (94) Haipa piping shi jinbu de ban-jiao shi.
 fear criticisms is progress MOD tripping-feet stone
 ‘Fear of criticisms is the tripping-feet stone for progress.’

‘Fear of criticisms’, as a weakness, is a problem that keeps one from making progress.

In fact, the whole inference pattern for journey, based on the simple SOURCE-PATH-GOAL schema, has transferred into the abstract domain of reasoning about difficulties or problems. In the following examples the source domain is journey on the water. They can be seen as specific-level examples of difficulties as features of the watery environment.

- (95) a. Zhongguo nü lan wei duo shijie guanjun
 Chinese women basketball to win world championship
 zai jing-tao-hai-lang zhong feng-jin.
 PRT terrifying-waves in forge-ahead-courageously
 ‘To win the world championship, the Chinese women’s basketball team was courageously forging ahead in terrifying waves.’
- b. Zhongguo Dui xiao-xin jin-shen de chuang guo le
 Chinese Team careful prudent MOD hew-way over ASP
 an jiao xian tan, chong jin le jue sai.
 submerged rocks dangerous shoals break into ASP final
 ‘Carefully and prudently, Team China hewed its way over the submerged rocks and dangerous shoals, and broke into the final.’

- c. Mei Ri maoyi tanpan geqian.
 America Japan trade negotiations run-aground
 'US-Japan trade negotiations ran aground.'

Both (a) and (b) are about the Chinese women's basketball team's effort to win the world championship in a tournament. This is, however, talked about in terms of a tough navigation full of perils (difficulties)--'terrifying waves', 'submerged rocks', and 'dangerous shoals'--that may cause the effort to reach the destination (the world champion) to be a failure. The perils/difficulties are impediments to the navigation, which is a specific-level case of motion. The same inference pattern is found in (95c), which is, however, about a completely different subject--the trade negotiations between the U.S. and Japan. Since the negotiations are held to reach the common goal-destination, they are understood as a ship on a journey. In this particular case, however, the ship gets stranded. Unless efforts are made to change the position of the ship, it can go nowhere.

The same in nature but different in kind is motion on the land. The inference pattern for motion on the land is rich and intricate, and it has also transferred into the conceptualization of difficulties/problems. The basic form of motion on the land is walking, i.e. movement with one's legs. The following examples are particular instances of the conceptual metaphor DIFFICULTIES/PROBLEMS ARE IMPEDIMENTS TO MOTION.

- (96) a. Mei Gu yimin tanpan bulü jiannan.
 America Cuba immigration negotiations steps difficult
 'The immigration negotiations between the U.S. and Cuba are walking with difficult steps (i.e. walking haltingly/hobbling)'
- b. Ningbo ren de jingming tuo-zhu le Ningbo
 Ningbo people MOD shrewdness pull-back ASP Ningbo

fazhan de jiaobu.
 development MOD footsteps
 ‘Ningbo people’s shrewdness pulled back Ningbo’s
 developmental steps.’

- c. Ming Qing yi-lai, Zhongguo zai shuxue fangmian
 Ming Qing since China PRT math aspect
 de zuowei bijiao pingdan,
 MOD accomplishments comparatively flat
 zu’e le Zhongguo wenming de jiaobu.
 check ASP Chinese civilization MOD footsteps
 ‘Since Ming and Qing Dynasties, China’s accomplishments in
 math have been comparatively flat, which has checked the
 footsteps of Chinese civilization.’
- d. Yi-cici shibai he daji bing
 one-after-another failure and blow yet
 mei-you shi ta zhi bu.
 have-not made him stop steps
 ‘Successive failures and blows have not yet made him stop his
 steps.’

It is implied in (96a) that the path along which the negotiations are moving is not flat or even, and therefore makes it difficult to walk on it. It is then an instance of difficulty as features of the terrain. The target conception is that the course of negotiations is full of difficulties, and making agreements, i.e. reaching destination in metaphorical terms, is not easy at all. In (96b), shrewdness, as the character defect shared by the people in a particular locality, is said to have curbed the development of the place. The conceptualization, however, is spatial, with the character defect understood as a resisting force checking the motion along a path. (96c, d) present similar spatial conceptions of different subjects. In these examples difficulties are understood as counterforces.

- The source-domain concept mapped onto difficulties in (97a) is the brambles which, as a kind of blockage, understandably make it difficult to

move along the path on which they grow. (97b-d) refer to the path/road itself, and difficulties are therefore understood as features of the terrain. In (97b), the road the artist has covered in his over eighty years of artistic career is very zigzag and rough. This means that he has come through many difficulties and hardships. The same inference pattern is found in (c) and (d), although they present different topics. The metaphor is really grounded in our experience. When the road is zigzag and rough, our movement, driving for instance, has to be slowed down or even stopped, depending on the degree of the features involved.

Whether a journey is smooth or rough depends on another important factor--the weather. Bad weather always makes it more difficult to travel. The conceptual metaphor DIFFICULTIES ARE IMPEDIMENTS TO MOTION also makes use of this knowledge in the inference pattern. For example:

- (98) a. Zai gongsi fazhan de daolu shang
 PRT company develop MOD road on
 bing-fei yangguang, xian-hua yi-pian.
 by-no-means sunshine fresh-flowers everywhere
 'The company's developmental road is by no means full of
 sunshine and fresh flowers.'
- b. Xiangmu jixu xiaqu, nengfou 'duoyun-zhuan-qing',
 project continue on whether cloudy-become-clear
 ling ren danyou ... yun-wu zhongyu bokai ...
 make people worried cloud-mist finally scatter
 'If the project went on, whether "it would change from cloudy
 to clear" made people worried ... the cloud and mist finally
 scattered ...'
- c. Zai mi-wu-chong-zhang zhizhong, liang guo gen
 PRT dense-fog-many-barriers in both countries more
 ying nuli tuidong liang-guo shangtan,
 should try-hard push-forward two-country negotiation

cujin liang-guo guanxi fazhan.
 accelerate two-country relationship development
 'In dense fog and among many barriers, both countries should
 try hard to push forward the bilateral negotiations and
 accelerate the development of the relationship between the two
 countries.'

- d. Tamen zhongyu zou chu mi-wu.
 they finally walk out-of dense-fog
 'They finally walked out of the dense fog.'

The 'sunshine' (98a) and the 'clouds' in (98b) are respectively associated with good and bad weather which, in turn, will affect the journey in a positive or negative way. The 'dense fog' in (98c, d) is particularly dangerous because it blocks the vision. All the dangers associated with invisibility are entailed here. In (98d), getting out of the dense fog simply means getting out of difficulty, trouble, or danger, as the case may be. All the examples in (98) demonstrate the fact that difficulties are also understood as features of the weather, as well as features of the terrain.

Another form of impediments to motion is the door/gate. When the door is closed, one cannot enter or exit an enclosed space. Therefore, a door/gate has a double function: it functions as a pass when it is open, and as a blockage when it is closed. Consider the examples below:

- (99) a. Gai gongsi pinqing haiwai xinxiyuan,
 this company employ overseas informants
 dakai guoji shichang da-men.
 open international market big-door
 'This company employed overseas informants, and opened the
 entrance of the international market.'
- b. Gai chang dakai le zou xiang
 this factory open ASP walk toward

guoji shichang de diyi-dao men.
 international market MOD first gate
 'This factory opened the first gate leading to the international market.'

- c. Gai chang chanpin chong chu guo men,
 this factory products break out national gate
 zou xiang guoji shichang.
 walk toward international market
 'This factory's products have broke out the national gate,
 walking toward the international market.'

In (99a, b), the international market is understood as a container which one can enter only after opening its door. In (99a), to have informants provide necessary information is compared to opening the entrance of the international market. In (99b) the international market is said to have more than one door/gate. Only after opening all of them can one get into the market. The factory concerned has opened one, and has to open the remaining ones to be in the international market. The conceptualization in (99c) is different. The country is a container, with a 'national gate'. The products that are meant to get into the international market have to first get out of the 'national gate'. This is not easy, as suggested by the verb *chong* 'break/charge'.

As an impediment to motion, the concept of door/gate is often used in the domain of negotiation, since the process of negotiation is understood as removing obstacles while moving on a path to reach a destination. A door, if closed, is then an impediment blocking the path. Look at the following examples:

- (100) a. Tanpan de da-men shang wei wanquan
 negotiation MOD big-door yet not completely

guan si, duihua de yudi shang cun.
 closed dead dialogue MOD room still exist
 'The door for negotiations is not yet completely shut up, and
 there still exists room for dialogue.'

- b. Mianlin dangqian de kunnan, you-guan ge fang
 faced-with present MOD difficulty involved every side
 youqi yao baochi lengjing he kezhi, bu-yao
 especially should remain calm and restrained shouldn't
 qingyi guan-shang tanpan da-men.
 rashly close negotiation big-door
 'Faced with the present difficulties, all sides involved should
 especially remain calm and restrained, and should not close the
 door for negotiation rashly.'

In these examples, if difficulties are removed, the door for negotiations is opened; if they remain in the way, or increase in number, the door for negotiations will be closed. With the door closed, the negotiations will lead to nowhere and end in failure.

Just like the concept of door/gate, the fence or hedge, as a kind of blockage, is also used as the source-domain concept mapped onto the abstract concept of difficulty. The following two are examples:

- (101) a. Shiqu shuang bi de Zheng Jieping mei-you bei
 lose both arms MOD Zheng Jieping has-not been
 buxin de zhalan zudang-zhu, ta que ba buxin
 misfortu MOD paling blocked he instead PRT misfortune
 biancheng le zou xiang huihuang de dong li.
 changed-into ASP walk toward splendor MOD motive force
 'Zheng Jieping, who lost both of his arms, has not been
 blocked by the paling of misfortune, but instead changed his
 misfortune into the motive force for walking toward the
 splendor.'
- b. Ta juexin chongpo yiwang de shenghuo
 he determined break past MOD life

fanli, chuang yifan shiye.
 hedge create a cause
 'He was determined to break the life hedge of the past, and
 create a cause.'

The misfortune of losing both arms, and the difficulty caused by it, are generally taken as impediments (hence the 'paling') to motion toward goals. In (101a) they are, on the contrary, turned into motive forces of such motion. In (101b), the person is determined to free himself from the frame of the past which is understood as 'hedge'. Similar forms of impediment are also found in the next two examples:

- (102) a. Xiang yong bu-zhengdang shouduan facai
 want use improper means get-rich
 de ren chi-zao yao peng-bi.
 MOD people sooner-or-later will hit-wall
 'Those who want to get rich by improper means will sooner or
 later run into a stone wall.'
- b. Qie mo zou shang 'duli' de si hutong.
 please don't walk on independence MOD dead alley
 'Please don't walk into the blind alley of "Independence".'

In either case, the difficulty as blockage is such that further movement is impossible. As in (102a), one will even get hurt if he is running too fast when running into the wall.

A kind of movement that entails difficulties as impediments is mountain climbing. While it is desirable to reach the mountain top, which is the desired destination, we know from our experience that climbing mountains may be very difficult or even dangerous because of their difficult or dangerous features of the terrain. It usually takes more strength

and courage to climb a mountain than to move on flat ground. This is exemplified by the following example:

- (103) Zai ben meiyou lu de dou bi shang chuang yitiao ziji
 PRT originally no path MOD steep cliff on break a self
 de lu. Jishi bu neng deng ling fengdian linglue na
 MOD path even-if not able mount peak appreciate that
 wuxian fengguang, ye ke wei houlai ren zan jicong jingji,
 boundless view still can for successors cut some brambles
 kai banjie shan lu.
 blaze half-way mountain trail
 ‘(They) want to break a path for themselves on the steep cliff without
 any paths. Even if (they) will not be able to mount the peak to
 appreciate the boundless view, (they) still can cut some brambles and
 blaze half of a mountain trail for their successors.’

What is being talked about here is not real mountain climbing, but scientific endeavor, namely, to ‘climb the world peak of science and technology’ (*pandeng shijie ke ji gao feng*). The whole pattern of experience and knowledge of mountain climbing has been transferred into the target domain of scientific endeavor.

As has been demonstrated, the conceptual metaphor DIFFICULTIES ARE IMPEDIMENTS TO MOTION really functions pervasively in Chinese. ‘Impediments to motion’ is a generic-level notion, inclusive of various specific-level concepts. As the cited examples have shown, difficulties are understood as counterforces, blockages, features of the terrain on land or water, and features of the weather. All those source-domain concepts are closely associated with journeys, namely movements in space from location to location. At the linguistic level, some of the metaphorical transfers from the domain of journey to the domain of event structure reasoning has already been conventionalized in the lexicon whereas others are activated at

the inferential level. It is particularly worth noting that the difficulty-as-impediment metaphor is closely related to the conceptual metaphors--states, changes, causes, actions, purposes, and means--discussed previously in this chapter. It is but an integral part of a metaphorical system.

4.3.8. *Others*

In this section, I come to some specific cases of the Event Structure Metaphor. The metaphorical mappings are specified as follows:

- (104) a. Expected progress is a travel schedule; a schedule is a virtual traveler, who reaches pre-arranged destinations at pre-arranged times.
 b. External events are large, moving objects.
 c. Long-term, purposeful activities are journeys.

In fact, these mappings are all covered by the basic notions of event structure discussed in the preceding sections. I will not, therefore, elaborate on them and instead, I will only cite a few examples to show that they are actually present in Chinese too.

(104a) is exemplified by the following sentence:

- (105) Yinjin guowai zhili shi gai sheng jin yong
 import foreign intelligence make this province only use
 ba-nian shijian zou-wan le changgui xuyao
 eight-year time finish-walking ASP convention need
 si-shi nian cai neng zou-wan de lu.
 forty year then can finish-walking MOD way
 'Importing foreign intelligence enables this province to use only
 eight years to finish walking over the way that conventionally
 requires forty years' walking.'

In this example, the convention is a virtual traveler who has to spend forty years walking over the distance. The ‘actual’ traveler, namely the province, covered the same distance in only eight years. This means that the actual traveler walks much faster, i.e. makes much faster progress, than the virtual traveler.

(104b) has the following two instances:

- (106) a. Gaige gei Zhongguo nongchun dai-lai
 reform to China countryside bring-come
 le juda bianhua.
 ASP huge change
 ‘The reform brought tremendous change to the countryside in China.’
- b. Gongye wenming fasheng zai Ou-Zhou, shu bei
 industrial civilization take-place in Europe several hundred
 nian lai ba Ou Mei zui-xian dai ru le
 years come PRT Europe America first bring into ASP
 fanrong de gongyehua.
 prosperous MOD industrialization
 ‘Industrial civilization took place in Europe, and in the last
 few hundred years, (it) first brought Europe and America into
 the prosperous industrialization.’

In (106a) the event of reform, as a large moving object, has come and brought change (as a smaller object) with it to the countryside of China. In (106b) the event of industrial civilization, again as a large moving object, has carried Europe and America (as smaller objects) into the (location of) prosperous industrialization.

Finally, (104c) is illustrated by the example below:

- (107) Wo yizhi guanzhu zhe tade yishu bulü. Zai qi manchang de
 I always follow ASP his artistic steps PRT his very-long MOD

yishu shengya zhong, quzhe, kanke shen duo, dan ta
 artistic career in zigzags ups-and-downs very many but he
 yong-wang-zhi-qian, pi-jing-zan-ji, paichu
 march-forward-bravely chop-thorns-cut-brambles remove
 chongchong luzhang, zou chu yitiao ziji de dute de
 one-after-another roadblocks walk out one self MOD unique MOD
 yishu daolu.

artistic path

'I was always following his artistic steps closely. In his very long artistic career, there were so many zigzags and ups-and-downs, but he marched forward bravely, chopping thorns and cutting brambles, removing roadblocks one after another, and he walked out a unique artistic path of his own.'

Artistic pursuits are long-term purposeful activities. In this passage, the career of an artist is conventionally compared to a journey full of hardships: the traveler broke his own path by chopping the thorns and brambles and removing obstacles. Therefore, every step forward is not easy at all.

As mentioned earlier, the three mappings in (104) actually incorporate the basic concepts of the event structure discussed in the preceding sections. When progress in (104a) is understood as travel (movement), it involves change of locations (states). When events are conceptualized as moving objects as in (104b), the change of states caused by them is again understood spatially in terms of locations. Finally, when long-term, purposeful activities are understood as journeys in (104c), the conceptualization involves such components as starting location (original state), destination (purpose/goal/objective), path (means), impediments (difficulties/problems), self-propelled movements (actions), and so forth.

4.4. The Object-Version in Chinese

It seems that spatialization and objectification of abstract concepts is a general principle of language. If this is true, then it supports the hypothesis that abstract reasoning is, to a great extent, ‘a metaphorical version of imagistic reasoning’ (Lakoff 1990: 39). There are various ways in which abstract concepts are spatialized or objectified. A very common way is through collocation. In the following set phrases, for instance, the head nouns, which are abstract in character, are modified by concrete adjectives that appeal to human senses.

- (108) a. *shen qing* *hou yi*
 deep affection thick friendship
 ‘profound sentiments of friendship’
- b. *zhong* *tuo* *hou* *wang*
 heavy trust thick hope
 ‘great trust and great expectations’
- c. *shen chou* *da* *hen*
 deep enmity big hatred
 ‘profound hatred’

Here *shen* ‘deep’, *hou* ‘thick’, and *da* ‘big’ are all spatial or dimensional adjectives that appeal to the sense of sight while *zhong* ‘heavy’ appeals to the sense of touch. When the concrete qualities these modifiers denote transfer to their modified, those abstract nouns acquire the concrete qualities and are therefore spatialized or objectified. In the following are some more examples:

- (109) a. *sixiang* *shendu*
 thought depth
 ‘depth of thoughts’

- b. qinggan de ziran liu-xie
 emotions MOD natural flow-pour
 ‘natural outflowing of emotions’
- c. chong-man lixing he xinxin de panduan
 fill-full reason and confidence MOD judgment
 ‘judgment filled with reason and confidence’

Thoughts in (109a) are spatialized by being collocated with the word meaning ‘depth’. Emotions in (109b) are conceptualized in terms of liquid when the collocation transfers the property of liquid to the target domain. In (109c), judgment becomes a container when it is ‘filled’ with reason and confidence whereas reason and confidence seem to be solids or liquids held in the container.

This kind of transfer from the concrete to the abstract often takes place in the collocation between an abstract noun and a verb, either in the [subject+verb] or [verb+object] construction. The following are examples of the former kind:

- (110) a. Maodun tu-chu.
 contradiction project-out
 ‘The contradiction projects/is projecting.’
- b. Ai yu hen jiaozhi zai yiqi.
 love and hatred interweave PRT together
 ‘Love and hatred interweaved together.’
- c. Ren-quan yu maoyi tuo-gou.
 human-right and trade un-hooked
 ‘Human right and trade are delinked.’

The abstract concepts denoted by the subject nouns take shape when hooked up with the verbs following them. In the following examples the abstract concepts denoted by the object nouns are also spatialized or objectified when they are collocated with the verbs before them.

- (111) a. *kaijue* *xin* *de* *sixiang* *shendu*
 dig new MOD thought depth
 ‘to dig into the new depth of thoughts’
- b. *shuli* *lianghao* *de* *daode* *fengshang*
 erect fine MOD moral habit
 ‘to erect fine ethics and habits’
- c. *zhuazhu* *jiyu*
 grab opportunity
 ‘to grab opportunities’

(111a) is an extension of (109a), in which the verb *kaijue* ‘dig’, collocated with the noun *shendu* ‘depth’, help spatialize the abstract concept of thoughts. (b) and (c) undergo similar metaphorical processes.

In effect, spatialization or objectification of abstract concepts is a pervasive phenomenon in language, as suggested earlier. With this point in mind, I now turn to specific conceptual metaphors of the object-version of the Event Structure Metaphor, as given in (8). I will discuss each of them to show how they work in Chinese. I will combine (8e) and (8f) into one since these two are both about the concept of purpose. It is worth mentioning that the aspects of the object-version, i.e. attributes, changes, causes, actions, and purposes, are also related to each other so closely, as has been demonstrated with those of the location-version, that many of the examples I use for one aspect can just as well be used for another. That is

to say, many examples can simultaneously illustrate more than one aspect. I would also like to mention, before proceeding to the discussion per se, that the object-version of the Event Structure Metaphor is just as, if not more, intricate and complicated as its location-dual. But I will not go as deeply here as in the location-version section because, in my opinion, objectification of abstract concepts is a more pervasive and, therefore, more detectable phenomenon in language. As a matter of fact, the location- and object-dual can never be separated from each other, and they always co-exist: objects always exist in, and move between, locations.

4.4.1. Attributes

The conceptual metaphor for attributes, according to Lakoff 1993b, is as follows, repeated from (8a):

(112) ATTRIBUTES ARE POSSESSIONS.

An attribute can refer to any abstract quality of a person or thing. The conceptual metaphor is therefore a general mapping from the abstract to the concrete. The following is but a particular instance of this general mapping.

- (113) a. Wo you xinxin.
 I have confidence
 'I have confidence.'
- b. Wo chong-man xinxin.
 I be-filled-full confidence
 'I am filled with confidence (i.e. full of confidence).'

In both cases, confidence, an abstract attribute, is conceptualized in terms of objects. The difference between them is that confidence in (b) is apparently held within its owner's body, which is conceptualized as a container, whereas this is not specified in (a).

However, there exists a syntactic difference that distinguishes the abstract quality from the concrete object as shown in the following pair of contrast:

- (114) a. Wo hen you xinxin.
 I very have confidence
 'I have a lot of confidence.'
- b. * Wo hen you yizi.
 I very have chairs
 'I have a lot of chairs.'

That is to say, when the object noun of *you* 'have' is abstract, the verb can be modified by the intensifier *hen* 'very', while such modification will lead to ungrammaticality when the object noun is concrete. But this particular syntactic difference should not bar the conceptual metaphor in (112) from being a valid one. More evidence is coming along.

We know that possessions are objects that one can bring along when traveling around. We also know that possessions are things that can be given away or passed around. These entailments are reflected in the following example:

- (115) Zhong Ri liang guo renmin dou yuanyi jiang yige youthao
 China Japan two countries peoples all willing PRT one friendly
 de Zhong Ri guanxi dai ru ershi-yi shiji,
 MOD China Japan relationship brought into twenty-first century
 shi Zhong Ri youthao shidai xiang-chuan.

have China Japan friendship generations passed-down
 'Both Chinese and Japanese peoples are willing to bring a friendly Sino-Japan relationship into the 21st Century, having the Sino-Japanese friendship passed down from generation to generation.'

In this example, peoples of China and Japan are to bring the friendly relationship with them when they 'move' into the 21st century, and they are also to pass the friendship down from generation to generation. The 'friendly relationship' and the 'friendship' are thus understood as valuable possessions that are carried around and passed down from one generation to another.

In the following example, the abstract attributes are compared to a 'relay baton', which by nature is a possession passed from one racer to another in a relay race.

(116) Yanmi de zhuzhi, yange de xunlian, yanming de
 tight MOD organization rigorous MOD training strict MOD
 jilü, yanjin de zuofeng, zhe sitiao guangrong chuantong
 discipline rigorous MOD style these four glorious traditions
 shi womende jieli bang, yao rongyuan chuan xiaqu.
 are our relay baton should forever be-passed down
 'The tight organization, rigorous training, strict discipline, rigorous style, these four glorious traditions are our relay baton, which should be passed down forever.'

Traditions are passed down from generation to generation while the relay baton is passed from one racer to another. Although this is a one-shot sports metaphor, it is still an manifestation of the attributes-as-possession metaphor at the conceptual level.

4.4.2. Changes

With changes in the object-version, the conceptual metaphor is as follows:

(117) CHANGES ARE MOVEMENTS (OF POSSESSIONS, NAMELY, ACQUISITIONS OR LOSSES).

This conceptual metaphor is illustrated by the following pair of sentences:

- (118) a. Ta dedao le yongqi.
 he acquire ASP courage
 ‘He acquired (i.e. gained) his courage.’
- b. Ta shiqu le yongqi.
 he lose ASP courage
 ‘He lost his courage.’

In these two examples, courage seems to be an object that moves in two different directions: it moves into the person’s possession in (a) as he acquires it; it moves out of his possession when he loses it in (b). Therefore, the person’s change regarding the abstract quality of courage is conceptualized in terms of movement of it in space. The same kind of conceptualization is found in the following two sentences.

- (119) a. Zai-jiuye gongcheng yijing shoudao
 re-employment project already receive
 le lianghao de xiaoguo.
 ASP good MOD effect
 ‘The project of re-employment has already received good effect.’
- b. Zhan shi de lianmeng guanxi yi
 war time MOD alliance relationship already
 yu shi tong qu.
 with time together go
 ‘The relationship of alliance during the time of war has gone with time.’

It seems that the ‘good effect’ has moved into the possession of the project in (a) whereas in (b) the ‘relationship of alliance’ has moved away from the former allied countries and, therefore, these countries do not form a coalition any longer. In both cases, the abstract concepts of ‘effect’ and ‘relationship’ are understood as objects traveling back and forth in space.

Sometimes, metonymy also comes in to function in conjunction with metaphor, as the following example shows:

- (120) Women renhe shihou dou bu neng hushi
 we any time all not can ignore
 nongye, diudiao cai lanzi he mi daizi.
 agriculture drop vegetable basket and rice sack
 ‘We can at no time ignore agriculture, dropping our vegetable basket
 and rice sack.’

Here the concepts of ‘vegetable basket’ and ‘rice sack’ are very culture-specific. In the urban setting of mainland China, people go shopping for vegetable (which can include meat) almost daily, usually early in the morning, and typically with a bamboo basket. They also go to the local rice store to buy rice, typically with cloth sacks. The vegetable basket and rice sack are then metonymically associated with agricultural production in general. When we have lost our vegetable basket and rice sack, we are short of agricultural products.

In the object-version, as the above examples have shown, changes are still conceptualized in terms of movements. However, it is movements of possessions relative to the possessor.

4.4.3. *Causes*

Similar to its location-dual, the object-version also conceptualizes causes in terms of forces, and the conceptual metaphor in this case is given below, repeated from (8c):

(121) CAUSES ARE FORCES (CONTROLLING THE MOVEMENT OF POSSESSIONS, NAMELY GIVING OR TAKING AWAY).

When this conceptual metaphor is realized at the linguistic level, a syntactic characteristic is that the phrases expressing causes take the subject position and play the role of agent, no matter whether they are human or not, or animate or not. Now look at the following examples:

- (122) a. Tamen xiang zai qu renmin juan kuan juan
 they to disastrous area people donate money donate
 wu, song wen nuan, xian ai-xin.
 materials deliver warmth present love-heart
 'They donated money and materials to the people in the disaster area, delivering warmth and presenting love to them.'
- b. Mian dui gungun-er-lai de Xifang wenhua chaoliu, women
 face to surging-come MOD Western cultural tide we
 zenyang cai neng wei Zhongguo gu-lao de yishu zhu
 how then can for China ancien-old MOD art inject
 ru huoli, shi zhi huanfa chu canlan de qingchun?
 into vitality make it shine out bright MOD youth
 'Faced with the Western cultural tide that is surging over, how can we inject vitality into the ancient art of China, making it shine with bright youth again?'

In (122a), money and materials are real possessions that are donated to the people in the disaster area, who also receive warmth and love, the abstract attributes, as if they are possessions too. The giving, here, is double-tracked, making double changes in the receivers, namely, changes in the

material and spiritual senses. In (122b), vitality, an abstract quality, is metaphorized as a liquid to be ‘injected into’ the container of ‘the ancient art of China’ so as to make a change in it. The change in this case is again caused by the actions of giving and receiving vitality-possession.

In the above two examples, the causes, i.e. the forces controlling the movement of possessions, are from human subjects. In the following examples, on the other hand, the causes are from inanimate subjects. A further distinction can be made among them: the receivers of possessions in the first group are human while those in the second are inanimate.

- (123) a. Zhege gushi gei ren yi qishi.
 this story provide people with enlightenment
 ‘This story provides people with enlightenment.’
- b. Zhege dianshi jiemu yu jiao yu le, jiang
 this TV program contain lesson in entertainment PRT
 huanle yu wenxin song gei guanzhong.
 joy and warmth deliver to viewers
 ‘This TV program contains a lesson in entertainment,
 delivering joy and warmth to viewers.’
- c. Shuji zhuangzheng liu gei shaonian
 book design leave to juvenile
 ertong yige binfenduocai de shijie.
 children a colorful MOD world
 ‘Book designs leave juvenile children a colorful world.’
- d. Hang-xian xiang yi-tiao-tiao youyi de
 air-lines like one-after-another friendship MOD
 niudai, ba Zhongguo he shijie lianjie
 ties PRT China and world connect
 qilai, chuansong zhe Zhongguo renmin dui
 up transport PRT Chinese people toward
 shijie renmin de shen qing hou yi.
 world people MOD deep affection thick friendship

‘The air lines are like ties of friendship, connecting China with the world, transporting Chinese people’s profound sentiments of friendship to the peoples all over the world.’

The common characteristic of these sentences is that a [-animate] noun has the role of agent (giver) in the subject position. Some attributes-possession are given away by these [-animate] givers to [+human] recipients. So, the syntax here is part of metaphor.

The examples below are different from the above ones in that the recipients of the attributes-possession are inanimate.

- (124) a. Xiandai gonglu wang jiang gei Pingding dai lai
 modern highway network will to Pingding bring come
 fanrong yu zhanxin de shenghuo.
 prosperity and brand-new MOD life
 ‘Modern highway network will bring to Pingding prosperity
 and a brand-new life.’
- b. Yishujia liudong gei ge-di chenmen de
 artists circulation to each-place oppressive MOD
 wutai zhu shang xinxian de huoli.
 stages pour on fresh MOD vitality
 ‘The circulation of artists poured fresh vitality onto the
 oppressive stages in all places.’

The ‘stages’ in (b) is a metonymy of the stagecraft, which, having received fresh vitality, is expected to show prosperity and boom.

The final example for causes-as-forces metaphor is as follows:

- (125) Zhihui yu naixin dique keyi bangzhu
 wisdom and patience indeed can help
 renmen baituo qijian de jiuchan.
 people break-from bias MOD tangle
 ‘Wisdom and patience can indeed help people break from the tangle
 of bias.’

In this example, wisdom and patience are the forces that can get people out of the tangle of bias. To put it differently, they have the force to take bias away from people.

In all the examples in this section, as we have seen, causes, animate or inanimate, are agents who give or take away attributes-possession while the themes of change are understood as recipients or losers of those attributes-possession.

4.4.4. *Actions*

The conceptual metaphor for actions is as follows:

(126) ACTIONS ARE SELF-CONTROLLED ACQUISITIONS OR LOSSES.

The following examples show the first aspect of the metaphor, namely, 'Actions are self-controlled acquisitions'.

- (127) a. Wo-guo feichang zhuyi xishou guoji
 our-country unusually pay-attention-to absorb international
 banquan jie de jingyan he changchu.
 copyright circle MOD experience and merits
 'Our country pays special attention to absorbing the experience
 and merits of the international copyright circle.'
- b. Ke ji jie yao dan qi minzu
 scientific technological circles should shoulder up national
 fu qiang lishi zhong ren.
 prosperity powerfulness historic heavy responsibility
 'Scientific and technological circles should shoulder up the
 historic responsibility for national prosperity and
 powerfulness.'

The Chinese verb *dan* in (b) originally refers to the action of carrying with a shoulder pole, which is the most common tool of carrying in the countryside of China. When one shoulders up the load of burden with the shoulder pole, one acquires that load. The load of burden here, however, is mapped onto the abstract concept of task and responsibility, which is a very commonly used metaphor.

The next two examples illustrate the second aspect of the metaphor in (126), i.e. 'Actions are self-controlled losses'.

- (128) a. Women yinggai gen-chu zhe zhong
 we should root-remove this kind
 bu-liang zhuangkuang.
 unhealthy situation
 'We should root-remove (i.e. completely remove) this kind of
 unhealthy situation.'
- b. Women yinggai sao-chu wen-mang.
 we should sweep-remove language-blind
 'We should sweep-remove (i.e. wipe out) illiteracy.'

The verb *gen-chu* 'root-remove' in (a) is associated with plant. When you want to get rid of a plant completely, you have to remove it from the root, as the Chinese idiom goes: *zhan cao chu gen* 'cut the weeds and dig up the roots' (i.e. to stamp out the source of trouble). When this verb is used, the undesired situation is mapped onto a undesired plant such as weeds, and the abstract becomes the concrete. The verb *sao-chu* 'sweep-remove' in (b) initiates a similar metaphorical process. It originally refers to the action of removing with a broom. Therefore, whatever object noun it takes is associated with garbage. So is the abstract situation of illiteracy in (b).

While actions are in part self-controlled acquisitions, the things that are acquired through actions are then purposes of the actions. Now, I turn to purposes of the object-version.

4.4.5. *Purposes*

For purposes, the conceptual metaphor of the object-version is given in (129a), and (129b) is its entailment:

- (129) a. PURPOSES ARE DESIRED OBJECTS.
 b. ACHIEVING A PURPOSE IS ACQUIRING A DESIRED OBJECT (OR RIDDING ONESELF OF AN UNDESIRABLE ONE).

A very common source domain here is agriculture, in which people sow seeds in hope of getting a harvest in return. Look at the following two examples:

- (130) a. Tamen renwei kao qiang ganzi zai Haidi
 they think with gun barrel at Haiti
 bozhong minzhu de jihua nan yi shixian.
 sow democracy MOD plan difficult to realize
 'They think that the plan to sow democracy in Haiti with the barrel of a gun is difficult to realize.'
- b. Linzhou Shi jianchi 'liang shou zhua', qude
 Linzhou City insist two hands grab acquire
 le wuzhi wenming he jingshen wenming
 ASP material civilization and spiritual civilization
 jianshe de shuang fengshou.
 construction MOD double harvest
 'Insisting on "grabbing with both hands", Linzhou City has acquired a double bumper harvest in constructing both material and spiritual civilizations.'

In (a) the desired object, i.e. the purpose is democracy, while the means to the end is being questioned. A bumper harvest is achieved in constructing both material and spiritual civilizations, which are the desired objects or purposes in (b). In (b), *liang shou zhua* 'to grab with both hands' is an established metaphor in the political discourse in China for 'to try to build up material and spiritual civilizations simultaneously'. A common slogan is *liang shou zhua, liang shou dou yao ying* 'to grab with both hands, with both hands tough'. The slogan is designed for the purpose of an ideal balance.

It seems that trees are desired objects across cultures. In Chinese, tree is often the source-domain concept for desired situations or purposes. For instance,

- (131) Ershi nian qian bo xia de youyi zhongzi jintian yi
 twenty years ago sow down MOD friendship seeds today already
 jie chu le fengshuo de guoshi. Zai shuang fang de gongtong
 bear out ASP rich MOD fruits PRT both sides MOD common
 peiyu xia, youyi zhi shu hui zai jin hou de
 cultivation under friendship MOD tree will PRT today after MOD
 suiyue li bu-duan zhuozhuang-chengzhang.
 years in no-pause sturdy-grow
 'The seeds of friendship sowed down 20 years ago have already borne out rich fruits today. Under the common cultivation of both sides, the trees of friendship will keep growing sturdy in the future years.'

The main purpose of growing fruit trees is to reap fruits. When rich fruits are reaped, the purpose is achieved. When trees grow bigger and sturdier, more fruits are expected. Of course, trees are valuable not because of fruits only; they are valuable in themselves, with their trunks, branches, and leaves, as the following example shows.

- (132) Zhege juyou sishi-ba nian lishi de qiye rujin mai
 this have forty-eight year history MOD enterprise today stride
 ru xianjin hanglie, yi zhang cheng
 into advanced ranks already grow become
 can-tian da shu. Jishu jinbu gen shi
 reaching-sky big tree. technology progress more make
 zheke lao shu fa-chu xin zhi, chengxian chu
 this old tree shoot-out new branches show out
 gen shen ye mao de bobo shengji.
 roots deep leaves luxuriant MOD exuberant vitality
 'This 48-year-old enterprise has strided into the ranks of the
 advanced, having grown into a big sky-reaching tree. Technological
 progress has made this old tree shoot out new branches, showing
 exuberant vitality, with its deep roots and luxuriant leaves.'

The ideal state of the tree metaphorizes the ideal state of the enterprise. When the enterprise has developed into an advanced one, the tree has grown into a towering one. That is to say, the metaphor here connects the source-domain concept--growing a towering tree (a desired object)--and the target-domain concept--developing an advanced enterprise (the purpose). It is noteworthy that the idiomatic phrase *gen shen ye mao* literally describes a tree which has deep roots and luxuriant leaves. In an extended sense, however, it means '(something that is) well established and vigorously developing'. That is the case with the enterprise under discussion.

A different source domain is found in the following sentence to map onto the target-domain concept of achieving a purpose.

- (133) Ta zhongqing yu suzhao ming pai.
 he be-deeply-in-love with modeling famous brand.
 'He is indulged in modeling famous brands.'

In this sentence, the verb *suzhao* ‘model/mould’ is associated with the art of sculpture. The desired objects in this case are works of sculpture. To achieve the purpose, i.e. to create famous brands of products, is to sculpt works of art.

When an abstract concept is understood as a desired object, one can then carry it around wherever one goes. This is exemplified in the following sentence:

- (134) Xiwang women gongtong nuli, jianli changqi wending
 hope we together try-hard build-up long-term stable
 de guanxi, bingqie ba ta dai ru ershi-yi shiji.
 MOD relationship also PRT it bring into twenty-first century
 ‘It is hoped that we work hard together to build up a long-term
 stable relationship, and take it into the 21st Century.’

While a good relationship between two countries is understood as a desired object, the 21st Century is conceptualized in term of a location. The desired thing to do is to first build up the relationship-object, and then carry it while traveling into the 21st Century-location. The 21st Century-location can be thought of as a stop of a long history-journey.

The parallel or opposite entailment of ‘Achieving a purpose is acquiring a desired object’ is ‘Achieving a purpose is ridding oneself of an undesired object’. The term ‘undesired object’ can be realized at the specific level by various things. I will, however, mention a typical one in the Chinese culture, as illustrated by the following examples:

- (135) a. Sanshi-jia qiye zhai-diao le kuisun maozi.
 thirty enterprises remove ASP loss hat
 ‘Thirty enterprises removed the hat of “loss” (or “deficit”).’

- b. Women zai-diao le ‘Zhongguo Pin You’
 we cast-off ASP China poor oil
 de luohou maozi.
 MOD backward hat
 ‘We cast off the backward hat of “China Is Oil-Poor”.’

Here ‘hat’ is a derogatory label of an undesirable quality or state.² So it is really desirable to remove it and cast it off. When those enterprises can remove their ‘hat of loss’, they have become profit-making. China is now oil-rich, and therefore it has cast off its backward hat of ‘oil-poor’. The purpose is achieved in either case when the undesired hat is removed and cast off. That is, the abstract concepts are really understood and talked about in concrete terms derived from our experience in the physical world.

4.5. Mixture of Location-Version and Object-Version

In sections 4.3 and 4.4, I separately demonstrated the two duals of the Event Structure Metaphor: the location-version and the object-version. I demonstrated them as two opposite categories. But in actual discourse, in fact, the two duals are often used together as two edges of one sword. It is very difficult to separate one from the other. In this section, I highlight the inseparability of these two duals by giving a few examples.

I start with a very simple example:

- (136) Jingji xuyao ran zhuolu, dian shache.
 economy need soft landing point brake
 ‘Economy needs soft landing and soft braking.’

In this sentence, economy (in China) is objectified by means of collocation: in its predicate ‘soft landing’ and ‘soft braking’ are terms respectively for

airplane and automobile. Thus, by means of collocational transfer, economy is metaphorized as an airplane and as an automobile. Airplanes and automobiles are means of transportation that go from location to location. Therefore, economy is understood as a vehicle while its growth is conceptualized in terms of spatial movement. The economy in China was growing (vertically) so high and developing (horizontally) so fast that it might get out of control and cause disaster. For this reason, it needed 'soft landing' and 'soft braking' since 'hard landing' may cause the airplane to crash and 'abrupt braking' may make the automobile turn over. As demonstrated in this example, the object-dual and the location-dual are interactive and interdependent.

Let us consider a different example:

- (137) Feng Zikai dai zhe chuantong wenren de xiuyang yu
 Feng Zikai bring ASP traditional scholars MOD understanding and
 xin-tai zou jin le gudian de zhuiqiu; dai zhe shanggan
 heart-state walk into ASP classic MOD pursuit bring ASP sentimental
 gudian de qingqu zou jin tade manhua.
 classic MOD taste walk into his caricatures
 'Feng Zikai walked into the pursuit of classics, bringing with him the
 understanding and the mental state of a traditional scholar; he also
 walked into his caricatures, bringing with him the taste
 for sentimental classics.'

Various abstract concepts are understood as either objects or locations. The concepts that are cast into the object-version are 'understanding', 'mental state', and 'taste for sentimental classics' whereas those cast into the location-version are 'pursuit of classics' and 'caricatures'. It should be pointed out that caricatures, that is, cartoon pictures, are not abstract, but the word *caricatures* here is used metonymically to refer to artistic

creation, the process of drawing pictures. With these concepts sorted into two groups of objects and locations, the spatialization of abstract reason is obvious: the artist took the understanding-object, the mental state-object, and the taste-object with him and walked into the pursuit-location and the creation-location.

The spatialization of abstract concepts in both location- and object-versions are also present in the following sentence from the political discourse:

- (138) Suizhe wo guo guomin jingji de
 following our country national economy MOD
 fazhan, zai yi Jiang Zemin tongzhi wei hexin de
 development PRT with Jiang Zemin comrade as core MOD
 Dang Zhongyang lingdao xia, tongguo zhe ci
 Party Central-Committee leadership under pass-through this time
 quan-guo jiaoyu gongzuo huiyi, yiding neng ba
 national education work meeting surely can PRT
 wo guo jiaoyu shiye tui xiang yige xin jieduan.
 our nation education cause push toward a new stage
 ‘Along with the development of the national economy of the country,
 under the leadership of the Party Central Committee with Comrade
 Jiang Zemin as the core, through this national conference on
 educational work, (we) certainly can push our nation’s cause of
 education toward a new stage.’

First of all, it is worth mentioning that the words *suizhe* and *tongguo* originally mean ‘to be following’ and ‘to pass through/over’ respectively, are now grammaticalized as prepositions which accordingly mean ‘(along) with’ and ‘through’ although, in different contexts, they are still used as main verbs. The spatial reasoning of the abstract concepts here can be illustrated by Figure 4.15, which contains a combination of a couple of image-schemas.

Figure 4.15. Abstract reasoning in spatial terms

- 1 = the development of the national economy of the country
- 2 = the Party Central Committee with Chairman as the core
- 3 = the national conference on educational work
- 4 = the pro subject (we)
- 5 = the cause of education of the nation
- 6 = the new stage

The figure is interpreted as follows. First, the economy is moving forward in its direction, denoted by a PATH schema. Second, parallel to the movement of the economy, the pro subject (we) is moving side by side with the economy, following the same direction. It is also denoted by a PATH schema. Third, the pro subject (we) is under the leadership of the Party Central Committee with the chairman as the core. The committee is denoted by a circle with a central point representing its core. The circle figure is really conceptualized as an object, i.e. a ball-like object. This is actually the FIGURE-GROUND schema. Since the pro subject (we) is 'under' the leadership of the Party Central Committee, the FIGURE-GROUND schema is then spatially above the PATH schema representing the pro subject (we). Fourth, the preposition *tongguo* 'through' suggests some means by which things are done and the concept of means, as argued

earlier, is conceptualized in terms of path to a destination. The pro subject (we) has to take this path to do whatever it aims to do, namely, to push the cause of education into the new stage. Fifth, the cause of education, represented by a box, is understood in this case as an object, being pushed to move toward and into the new stage, which is conceptualized as a long-shaped location. As is demonstrated here, this spatial reasoning of abstract concepts is based on the combination of some simple image-schemas: the PATH, the CONTAINER, and the FIGURE-GROUND. The example here, very literal in the traditional sense, is actually cast in the Event Structure Metaphor with its two versions of location and object.

Very often, it is interesting to note, the same abstract concepts are cast in both versions, in one sentence, as in the following two sentences:

- (139) a. Mian dui shen-zhong de pingkun, tamen
 face to deep-heavy MOD poverty they
 xuanze le xin de tuwei lujing.
 choose ASP new MOD break-out path
 ‘Faced with the deep and heavy poverty, they chose a new path
 for breaking out of encirclement.’
- b. Ta wei Xibei dai lai le quan xin de
 he to Northwest bring come ASP completely new MOD
 guanli linian, ye ba Xibei dai
 management concepts also ASP Northwest bring
 dao le guangming de qidian mianqian.
 to ASP bright MOD starting-point front
 ‘He brought to Northwest (Airlines) the brand new
 management concepts; he also brought Northwest (Airlines)
 onto the bright starting point.’

In the first clause of (139a), poverty is said to have depth and weight, just like an object; in the second clause it is however understood as a bounded

space in which the people are encircled and from which they are trying to free themselves. Thus, poverty is conceptualized dually as an object and as a location. In a similar vein, the first clause of (139b) characterizes the organization of Northwest Airlines as a location to which the new president brings with him ‘the brand new management concepts’, which are understood as objects. The second clause of (139b), in contrast, features the airlines as an object, which the new president brings to ‘bright starting point’. By inference, we know that the organization of Northwest Airlines is starting a new journey or a new race. In a sense, (139a, b) are examples of mixed metaphor at conceptual level, with both source concepts of object and location mapped onto the same abstract target concept in a single sentence. Sometimes, mixed metaphor at conceptual level may not be very logical, as illustrated by the following sentence.

- (140) Baohu shengwu duoyangxing zhong zai xingdong, zhong
 protect biological diversity important to act important
 zai canyu, ying xiying shehui ge-jie
 to participate should attract society all-walks-of-life
 he guangda renmin qunzhong jiji canyu
 and broad people masses actively participate
 jin-lai, gongtong tui-dong zhe yi weida shiye.
 enter-come together push-move this one great cause
 ‘To protect biological diversity, it is important to act and to participate. (We) should attract all walks of life and the broad masses of people to actively participate in (this cause), and together to push this great cause forward.’

Here, the ‘great cause’ is to protect biological diversity. Again, this cause is conceptualized simultaneously as a location and as an object. As a location, people are attracted to get into it. That is, one has to be in it to be part of it, just as one has to be physically in the classroom to attend the

class. As an object, those people who participate in this cause are pushing it forward through space. But the illogicality is: How can these people push this cause forward while they are inside the cause? An analogical question to ask is: How can people push a car forward while they are inside the car? However, the illogicality here does not seem to affect the validity of the statement. The shift of narrative point of view from inside to outside seems to be all right.

My last two examples make an interesting pair of contrast--a mirror image:

- (141) a. Chaoxian Bandao chu yu jiqi fuza
 Korean Peninsula be-located in extremely complicated
 dongdang de xingshi zhizhong. Zhe ci Hanguo zhi
 turbulent MOD situation inside this time South Korea MOD
 xing jiang ba heping yu wending dai dao Chaoxian Bandao.
 trip will PRT peace and stability bring to Korean Peninsula
 'Korean Peninsula is located in a extremely complicated and
 turbulent situation. This trip to South Korea will bring peace
 and stability to Korean Peninsula.'
- b. Zhe ci Hanguo zhi xing qude le
 this time South Korea MOD trip acquire ASP
 yuan-man , chenggong, ye jiang you li yu
 round-full success also will have benefit to
 tui-dong Chaoxian Bandao xingshi jin-yi-bu
 push-move Korean Peninsula situation further-a-step
 zou xiang heping yu wending.
 walk toward peace and stability
 'This trip to South Korea acquired complete success, and will
 also help push the Korean Peninsula situation to walk further
 toward peace and stability.'

These two passages comment on the same trip--the trip by Premier Li Peng to South Korea for a state visit--from different points of view: (a) prior to

the trip while (b) after it. The passages contain the following mappings between object/location and abstract concepts:

(141')	a.	situation	-->	location
		peace	-->	object
		stability	-->	object
	b.	situation	-->	object
		peace	-->	location
		stability	-->	location

The mirror image is clear here. The 'complicated and turbulent situation' in (a) is a location in which Korean Peninsula is located. On the other hand, the same situation in (b) is an object being pushed toward the locations of 'peace' and 'stability'. As for 'peace' and 'stability', they are objects in (a), brought by the trip to Korean Peninsula located in a complicated and turbulent situation-location. When they are in the possession of Korean Peninsula, namely, when Korean Peninsula has acquired the peace-object and stability-object, the former becomes peaceful and stable as the owner of these attributes-possession. In contrast, 'peace' and 'stability' are locations in (b), toward which the complicated and turbulent situation-object is being pushed. They are desired locations for the situation-object to be in; they are therefore destinations for the situation-object. Once the situation-object reaches its destinations, it is in states-locations of 'peace' and 'stability'. By being in the states-locations of 'peace' and 'stability', the situation-object is peaceful and stable. It is really interesting to note how exactly the same abstract concepts are cast in such a mirror image of location/object versions.

This section has shown that although there exist two distinguished versions of the Event Structure Metaphor, they cannot be separated from each other completely and are very often interactive with each other and operative in combination. I hope that my analysis here at least suggests how rich and intricate the Event Structure Metaphor, with its dual versions of location and object, may be in actual discourse.

4.6. Summary

In Chapter 4, I have demonstrated, in some detail, the Event Structure Metaphor in Chinese, with its location-version and object-version, in the light of Lakoff 1990, 1993a, 1993b, and 1994. I have first worked out the location-version. At the conceptual level, as I have shown, the metaphors in (1) are very much the same between English and Chinese. Under the central Event Structure Metaphor, these metaphors form a complicated system, with each of its components interactive in an intricate way with the others. When states are understood as locations, changes of states are then changes of locations, i.e., movements from one location to another. Since changes are understood as movements, the causes of changes are correspondingly conceptualized as forces that cause movements to happen. Actions are, in a sense, causes since they are always taken to make changes happen. Therefore, whereas changes may be passive movements forced by causes, actions are always self-propelled movements that transitively force other things to move (change). As actions are understood as self-propelled movements, the purposes (also goals or objectives) of actions then become the desired locations that one wants to reach. In other

words, purposes are destinations. To reach a destination one always has to take a path that connects the starting location and the destination. The path is thus mapped onto means by which to achieve purposes. In the physical world, there may be different paths leading to the same destination. In the abstract domain, there may be different means to the same end/purpose. Since to achieve one's purpose is to move and reach the destination, difficulties in achieving one's purpose are accordingly impediments to movement toward the destination. Thus, the various aspects of the event structure are closely related to each other. The Event Structure Metaphor is really a metaphorical system that projects the physical world into the abstract domain of reasoning about events. To put it differently, events are structured via metaphor that projects the concrete onto the abstract.

As is shown, the basic image-schemas underlying the location version of the Event Structure Metaphor are the CONTAINER schema and the SOURCE-PATH-GOAL schema, although some others are also at work in cases.

I have then moved on to the object-version of the Event Structure Metaphor. The conceptual metaphors of the object-version, as given in (8), are again demonstrated as functioning in Chinese in a similar way as they are in English, even though differences may exist between these two languages at the specific level. Just as its location-dual, the object-version also presents rich and intricate system with its aspects interactive with each other. In this version, abstract attributes, or concepts in general, are conceptualized in terms of objects or possessions that exist in three-dimensional space. When one acquires an attribute-object, one possesses

that attribute-object. Contrastively, when one loses an attribute-object, one does not possess that attribute-object any more. Changes are, then, also understood as movements, as they are in the location-dual, but they are movements of attributes-objects into or out of one's possession, i.e. acquisitions or losses. By inference, causes of changes are forces controlling the movements of attributes-objects into or out of one's possessions. Actions, which are taken to cause changes, are self-controlled acquisitions or losses, namely, obtaining or getting rid of attributes-objects. One always takes action to achieve a purpose. In the object-version, therefore, purposes are understood as objects: to achieve a purpose is to obtain a desired object or get rid of an undesirable one.

As I have shown, objectification of abstract concepts is a general principle of language. This principle is realized, very often, by means of collocational transfer. That is, abstract concepts are objectified by being modified or predicated by properties of concrete objects.

Finally, I have demonstrated how location-version and object-version are mixed in actual discourse to produce a metaphorical version of abstract reasoning based on imagistic reasoning of space. Although the two versions--location and object--can be distinguished from each other in the Event Structure Metaphor, they probably always interact with each and function in combination. As has been shown, a very abstract concept can be cast in both location- or object-version, depending on the narrative point of view, and in actual discourse, it can be assumed, the narrative point of view is shifted back and forth between the two versions quite freely as needed.

The findings of this chapter reinforces the findings of Chapter 3 regarding the status of the MIND-AS-BODY metaphor, and the distinctions between the literal and the metaphorical, and between conventional and novel metaphors. The investigation reported here shows that English and Chinese share the high-level conceptual mappings of both location- and object-versions of the Event Structure Metaphor.

NOTES:

¹ However, as in English, ‘shadow’ is distinguished from ‘shade’, which is usually associated with the sense of ‘a desired cool place’. The contrast should also exist in Chinese.

² In Chinese, *maozi* ‘hat/cap’ also means ‘label’, ‘tag’, or ‘brand’, usually in a derogatory sense. Another example is:

(i) Ta zhai diao le ‘wen-mang’ de maozi.
 he remove off PRT language-blind MOD hat

‘He rid himself of the hat (label) of “illiterate”.’

Besides, the idiomatic phrases also include *kou maozi* ‘to clap/slam a hat on sb’s head (i.e. to put a negative label on sb.)’; *ai dai gao-maozi* ‘to love to put on a tall hat (i.e. to be fond of flattery)’; *dai lü maozi* ‘to put on a green hat (i.e. to be a cuckold)’, etc.

CHAPTER 5

CONCLUSION

As stated in the Introduction, the primary objective of the present study is to contribute to the contemporary theory of metaphor from the viewpoint of Chinese, so as to help place the theory into a wider cross-cultural and cross-linguistic perspective. To achieve this objective, I have tried to work toward a partial (partial because it is basically a study in one language--Chinese--with English as point of reference for comparison) answer to what I believe to be the two fundamental questions faced by the contemporary theory of metaphor. The first of these is whether abstract reasoning is at least partially a metaphorical version of image-schematic reasoning based on our everyday knowledge and bodily experience of the physical world. The contemporary theory claims that abstractions and emotions are understood, at least partially, metaphorically in terms of our physical experience. If that is the case, then metaphor should play a central role in human cognition, characteristic of human understanding. The second fundamental question concerns the universality or relativity of conceptual metaphors in human conceptual systems. The contemporary theory assumes that such conceptual metaphors vary in universality, from being universal in human cognition to being widespread across various cultures to being particular to specific cultures. It would be of great theoretical significance to find out what conceptual metaphors are universal, or widespread, or culture specific. The universal implications suggested by the contemporary theory of metaphor, such as the existence of

universal cognitive structures (conceptual metaphors and image schemas), have to be investigated systematically on a cross-linguistic and cross-cultural basis. A thorough study done in Chinese should contribute to the establishment of the universal status of certain cognitive phenomena.

In this study I have approached these two questions by focusing on two metaphorical systems--the TIME-AS-SPACE metaphor and the Event Structure Metaphor. Of these two, the former has attracted much more attention than the latter. But even for the former, few studies have been based on thorough and systematic analyses of linguistic evidence. It has been suggested that these two metaphors are candidates for universal mappings (e.g., Alverson 1994, Lakoff 1994). Can the proposed candidacy be established in Chinese?

My study of the TIME-AS-SPACE metaphor in Chinese supports Alverson's (1994) general hypothesis that the diversity in the experience and expression of time across cultures should be situated in, and understood in terms of, a framework of experiential and linguistic universals. However, my study contradicts his specific claim about the relationship between the time and the Observer in terms of motion and directionality in Chinese. According to his finding, the Observer in Chinese is always motionless facing the past. The future times move toward him from behind. Those that have passed him, moving further and further away ahead of him, become past times. In short, according to Alverson, the Observer in Chinese always has the back-to-the-future orientation. As he sees it, the relationship between the time and the Observer in terms of motion and directionality in Chinese presents a contrast with that in

English, where there exist three different cases (as illustrated by Table 3.1). In the first case, the Observer is motionless facing the future, while time is a still course, with events moving through the course toward the Observer, and becoming the past once passing him. In the second case, the time is a medium in motion, carrying events with it toward the motionless Observer who faces the future. However, the times stop moving further after they have passed the Observer becoming the past times. The third case differs from the previous two in that the Observer this time moves toward the future through the still course of time. In all these three cases for English, the Observer has a front-to-the-future orientation.

My study, however, shows that the spatial conceptualization of time in Chinese in general falls into Lakoff's (1990, 1993a, 1994) model constructed for English. In this model, there exist only two major cases in English, which are largely similar to the second and the third cases of Alverson's (1994). In the first special case (Case 1), the Observer is motionless facing the future, while times are moving like objects with their fronts toward the Observer. As soon as a particular time has passed the Observer, it becomes the past behind him. In the second special case (Case 2), the Observer is moving toward the future, while times are bounded landscape that remains motionless. The part of the landscape that the Observer has traveled through is the past; the location where the Observer is is the present time, and the part of the landscape ahead of the Observer that he is going to travel through is the future. I have found that the two special cases can apply to Chinese exactly as they are described above. That is to say, contrary to what Alverson (1994) has found as the orientation of

the Observer, namely, the Observer always faces the past, I have found that in Chinese the Observer always faces the future, just as that in English, except when he would want to go back to a particular past time mentally. Under such circumstances, the Observer would 'turn around' toward the past and even 'run after' the past. So I have found that the similarity between English and Chinese in terms of spatial conceptualization of time is much stronger than Alverson (1994) found it to be.

There are two important differences between Alverson's and Lakoff's models for time in English. The first is the difference between Alverson's time as moving medium and Lakoff's time as moving objects. Alverson's version assumes that 'in English events moving in time or the moving of the medium of time itself ceases after they "pass" the speaker'. That is, 'The past remains stationary, and the speaker moves, leaving it behind' (104). This, according to Alverson, shows a contrast to Mandarin Chinese, in which 'events that are before or have passed the experiencer themselves continue to move further and further away from the experiencer, who remains "now" but still in the ordinal sequence' (104-5). Lakoff's version, however, does not assume that in English the times or events would stop moving further and further away from the Observer as soon as they have passed him, i.e., as soon as they have become the past. This means that Lakoff's version does not assume the kind of contrast that Alverson assumes between English and Mandarin Chinese. If there is in fact such a contrast between English and Chinese is still subject to further empirical investigation.

The second difference between Alverson's and Lakoff's models for time in English is that Alverson constructed one more case than Lakoff. In this case, i.e. perspective (a), time is a still course in which events move toward the stationary Observer. It seems, however, this special case is unnecessary, for the evidence for its independent existence is slim. According to Alverson (1994: 106), perspective (a) is illustrated by these examples: *Christmas is coming; who knows what the day will bring; tomorrow comes after today; the past is behind us*. Perspective (b), however, includes these examples: *time is coming when; the future is upon us; time marches on; they have gone before us*. It seems that the distinction between these two perspectives is untenable. Is 'Christmas' just an event but not a time? When we say 'who knows what the day will bring', are we not conceptualizing 'the day' as a moving object that will 'bring' to us some event(s)? The verb *bring* is self-evident. In *tomorrow comes after today*, are 'tomorrow' and 'today' different times or different events? I think the former is the correct choice. Finally, in what way does *the past is behind us* constitute a piece of evidence for perspective (a)? It seems that it serves as evidence for both perspective (b) and (c) (i.e. Case 1 and Case 2 in Lakoff's model). In short, it seems unnecessary to distinguish perspective (a) from perspective (b) in Alverson's model, since whenever events move, they seem to be carried by time. Therefore, perspective (a) is not independently necessary.

My study has also shown that, while the two special cases in Lakoff's model are two major ones, a third case, which is comparatively minor, is still needed to display a complete picture of spatial conceptualization of

time in both English and Chinese. In this case, time consists of two elements: the first is a bounded landscape like a road that stretches further into the future; the second is an object that travels down the road with a prearranged schedule, i.e. to reach a prearranged point at a prearranged time. The Observer in this case is supposed to keep pace with the moving time-object, but he may lag behind or go ahead of it. So, in this case, both the Observer and the time-object are moving, in the same direction of the future, over the time-landscape.

Therefore, my study has shown that English and Chinese share exactly the same three special cases. That is to say, they not only follow the same principle of spatialization of time, but also have the same directionality parameter setting: the future-in-the-front. This seems to suggest that English and Chinese are fundamentally identical in terms of conceptual mappings, and the differences between them mainly stay at the linguistic level, i.e. in the specific linguistic instantiations of the conceptual mappings. For instance, the English word *future* does not have a spatial implication in itself. On the other hand, the Chinese words *jiang-lai* (will-come) and *wei-lai* (not[-yet]-come) both literally express spatial orientation and movement. Despite this surface difference, nevertheless, 'future' in both languages is conceptualized metaphorically as something that will come to us and that we face. Put differently, at the conceptual level, the mapping is exactly the same in both languages.

The difference between English and Chinese in the vertical up-and-down dimension is another example to illustrate the point. In English the conceptual mapping of the earlier onto the upper is not expressed richly at

the linguistic level, but it is still there at the conceptual level (the drawing of a family tree is a telling illustration). In Chinese, contrastively, the same conceptual mapping is expressed richly at the linguistic level. Given that metaphor is primarily conceptual, it can be said that English and Chinese have the same metaphorical mapping at the conceptual level. Whatever differences between these two languages exist at the linguistic level, in particular linguistic instantiations of that conceptual metaphor.

It seems that languages cannot be radically different in terms of their spatial conceptualization of time. For instance, Alverson (1994: 82) listed the following as the space-time deixis in Hindi.

- (1) a. What lies before me (in space/time) I shall reach.
- b. Whatever comes later/afterward I shall reach.
- c. X follows Y in time.
- d. X precedes Y in time/X comes before Y.
- e. What has happened/done is behind me (in space/time).
- f. Those who have gone before in time are ahead of me.
- g. Those who follow me in time are behind me.

(1a-e) above are apparently shared by both English and Chinese, explainable by special Cases 1 and 2. Specifically, (1a, b) are Case-2 examples, and (1c, d) belong to Case 1, while (1e) can be accounted for by both Case 1 and Case 2. What about (1f, g)? In these instances, people earlier in time than the Observer are ahead of him whereas those who are later in time than him are behind him. Does that mean that the Observer is facing the past? The answer is 'No'. In fact, these instances are accounted for by Case 2 in which the Observer is traveling along the time-landscape in the direction of the future. However, in such a case, the Observer could be seen as one of a line of people moving one after another toward the

future. Those who are in front of the Observer have gone earlier in time (i.e. older than him) while the Observer is following them in time (i.e. younger than them). Those who are further ahead are even earlier in time than those who are immediately ahead of him. Conversely, those who are behind the Observer are following him, and later than him, in time (i.e. younger than him). Those who are immediately behind him are earlier in time than those who are further away in the back. As a matter of fact, this kind of conceptualization of time exists also in English and Chinese, just as Case 2 exists in both of these two languages. For instance, in the English words *forefather*, *forerunner*, *predecessor*, and *precursor* the prefix *fore-* and *pre-* both have a primary spatial sense meaning ‘front’ or ‘in front’ (as in the term *prefix* itself). In Chinese, this front-back dimension in the space-time deixis is a common one, as in the following pairs of antonyms.

- (2)
- a. qian-ren (front/ahead-people) ‘forefathers; predecessors’
 - b. hou-ren (back/behind-people) ‘later generations; descendants’
 - c. qian-bei (front/ahead-generation) ‘senior (person); elder; the older generation’
 - d. hou-bei (back/behind-generation) ‘younger generation; juniors’

In this way, the history of human evolution can be conceptualized as a special kind of relay race toward the future: those who run in the front will pass the ‘torch’ to those who follow them, and then drop out.

Alverson (1994: 90) also listed the space-time deixis in Sesotho such as follows:

- (3) a. Those things in front (of me), I will come to them.

- b. Those (events) that have already happened, I turn away from (i.e., to leave behind).
- c. Things that have happened before/earlier, I have left them behind.
- d. That which is in front has not come to happen.
- e. That which is front is later.
- f. That which has not yet arrived/happened, we face.
- g. Those things that come, I will come to them.

All these instances, except for (g), are covered by either Case 1 or Case 2. (3g), phrased as it is, seems to be an instance of 'duality' which has to be handled by both Case 1 and Case 2.

It needs to be pointed out that I did notice one instance in both Hindi and Sesotho, as given by Alverson (1994), which cannot be accounted for by any of the three special cases. They are: *Whatever happens/comes in the after shall follow me/will keep behind me* in Hindi; and *Those things that come/arrive behind/later, they will follow me* in Sesotho. Phrased as they are, these two instances may represent particulars in Hindi and Sesotho respectively that are not shared by English or Chinese.

The similarity in the spatial conceptualization of time across these languages are remarkable. It strongly supports Alverson's (1994: xii) hypothesis that 'the experience of time is based on a universal template of spatial experience'. The spatial conceptualization of time is reflected in language. In particular, two most common image schemas (abstract and skeletal images) capture the spatial experience metaphorically mapped onto the expression of time. These are the SOURCE-PATH-GOAL and CONTAINER schemas. Specifically, in Case 1, times take a path moving from point A (source-future) to point C (goal-past), with the Observer in between at

point B (location-present). In Case 2, times are bounded spaces (landscape), each represented by a CONTAINER schema. The Observer takes a path over and through those spaces, from point A (source-past) to point C (goal-future), but he is now in between at point B (location-present). Case 3 is a sort of combination of Cases 1 and 2. Thus, the metaphorical mapping obeys the Invariance Principle, which states that the image-schematic structure of the source domain is projected onto the target domain in a way that is consistent with inherent target domain structure.

As Lakoff (1990, 1993a, 1993b, 1994) has demonstrated in English, the Event Structure Metaphor is a very complicated hierarchical system that consists of a series of conceptual mappings of the components of event structure--states, changes, causes, actions, purposes, means, and difficulties--cast in two versions--the location-version and the object-version. Lakoff suggests that this metaphorical system is his candidate for a metaphorical universal. However, studies have not been conducted in other languages to prove its universal status. In Chapter 4, I have presented a detailed study of the Event Structure Metaphor in Chinese. My study shows that in Chinese various aspects of event structure are indeed conceptualized metaphorically in terms of space, motion, and force. Furthermore, the conceptual mappings that are high in the hierarchy are found exactly the same as in English, although the actual instances of their manifestation at the linguistic level may be similar to or different from English. Some linguistic instances of metaphor, such as 'turning in the money hole', 'dropping the vegetable basket and the rice sack', and 'casting off the hat', are deeply embedded in the Chinese culture, while others are less so and many are very much

shared by both English and Chinese. The degree of similarity between English and Chinese at the higher level of the hierarchy is again remarkable. It reflects the common bodily and spatial experience in the physical world.

The conceptual mappings of the various aspects of event structure are closely related to each other, projecting the intricate structure of the physical world onto the abstract domain of events. It is found that, while the two versions of the metaphorical system are distinguished from each other, i.e. spatialization and objectification of abstract concepts, they are often applied in combination, just as in the physical world, where space is occupied by objects and objects exist in space.

As in the TIME-AS-SPACE metaphor, the CONTAINER and the SOURCE-PATH-GOAL schemas are found to be the most common ones structuring the conceptual mappings under the Event Structure Metaphor. Specifically, when states are understood as locations and purposes as desired locations, locations are structured by the CONTAINER schema. When changes and actions are understood as movements and means as paths, the SOURCE-PATH-GOAL schema is involved in the metaphorical projection. This image schema also structures the mappings of progress as movement, external events as large moving objects, and long term purposeful activities as journeys. Difficulties are conceptualized as whatever impediments exist along the path for movement. Besides, causes are understood as forces, which belong to the force image that is nonvisual but has visual consequence. Again as in the TIME-AS-SPACE metaphor, our basic spatial experiences in the physical world, crystallized into image

schemas, have worked their way up into human abstraction, structuring various abstract concepts in spatial terms, making our abstract reasoning a metaphorical version of spatial reasoning. That is what is meant by Lakoff (1990) as the consequence of the Invariance Principle.

Having worked out a detailed analysis of the TIME-AS-SPACE metaphor and the Event Structure Metaphor in Chinese, I have found that they are closely parallel to their counterparts in English at the conceptual level. Thus, my study in Chinese has, to a certain degree, strengthened the candidate status of these two as universal conceptual metaphors. In the case of the TIME-AS-SPACE metaphor, although there exists, across languages, a parameter regarding whether the Observer faces the future or the past, resulting from culturally shared understanding of time, the general principle of spatial conceptualization of time is most likely universal, based on universal human experience. The Event Structure Metaphor is a much more intricate but less studied system of metaphor. My study here in Chinese is in a sense detailed, but still not deep enough to reveal the real intricacy of this huge hierarchical system. It may have just revealed the tip of the iceberg. Much more work needs to be done, to go deeper down the hierarchy. My hypothesis for further study is that the lower level of the hierarchy will display more diversity or differences across cultures and languages. It waits to be proved by sufficient cross-cultural and cross-linguistic research.

In general, the present study in Chinese reinforces various findings of the contemporary theory of metaphor introduced in 2.7. With regard to the nature of metaphor, it supports the claim that metaphor is the main

mechanism through which we comprehend abstract concepts and perform abstract reasoning. As has been seen, the abstract concepts in Chinese under discussion are structured metaphorically in image-schematic terms. When we reason about various abstract concepts, we cast them in a spatial mould, with the abstract relationships between the concepts represented by spatial relationships. The spatial representation of abstract relationships is apparent in both TIME-AS-SPACE metaphor and Event Structure Metaphor I have discussed. It demonstrates that, while abstraction is characteristic and definitional of human mind, it is fundamentally metaphorical in nature. Moreover, the present study also supports the claim of the contemporary theory that metaphorical mappings are primarily conceptual, although they are realized and manifested in linguistic terms. When a particular metaphor is said to be universal, it is likely that it is universal conceptually rather than linguistically. Particular instantiations of that conceptual metaphor may still vary because specific cultural models in different languages may dictate different choices of linguistic realization.

With respect to the structure of metaphor, the present study reinforces the view of the contemporary theory that each metaphorical mapping is a fixed set of ontological correspondences between entities in a source domain and entities in a target domain, and that when those fixed correspondences are activated, mappings can project source domain inference patterns onto target domain inference patterns. At the linguistic level, when lexical items denoting source domain concepts have transferred into the target domain and have been consistently used in the target domain, they become polysemous, having acquired a stable sense in the target

domain. Some other lexical items may completely lose their original senses in the source domain after they have acquired a stable sense in the target domain. Still others are used in the target domain inconsistently or irregularly, constituting more 'novel' instances of metaphorical extension. But some lexical items are used only in the source domain even though they are potential metaphorical transfers due to the fixed correspondences between the two conceptual domains. These four cases should exist in all languages. Of the fixed set of correspondences between entities in the source domain and entities in the target domain under a particular conceptual mapping, some may be activated while others may not. The activated correspondences project the source domain inference patterns onto the target domain, but the inactivated correspondences are still there without yielding rich inference patterns in the target domain. For instance, the conceptual correspondences between the up-down dimension in space and the earlier-later dimension in time is activated in Chinese and not so activated in English, but such correspondences exist in both languages.

Furthermore, the present study supports another claim of the contemporary theory, namely, metaphorical mappings are not arbitrary, but grounded in our bodily experience and daily knowledge. The degree of similarity between English and Chinese in the spatial conceptualization of time and various aspects of event structure is very illustrative. In both languages the conceptualization is grounded in basic bodily experience of human beings functioning in the physical world. Particularly, such abstract concepts as time, states, changes, causes, actions, purposes, means, and difficulties are conceptualized in terms of space, motion, and force, which

are common or similar to all human beings. The common or similar human experience which transcends cultural boundaries is then reflected in languages.

From a macro-level perspective, the present study is of course still very limited in terms of both breadth and depth. It has at best provided some evidence from Chinese in favor of the contemporary theory of metaphor in general, and of the universal status of the TIME-AS-SPACE metaphor and the Event Structure Metaphor in particular. It is but one step of a long journey of cross-linguistic and cross-cultural search into human cognition.

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