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List of Abbreviations

ASSOC   associative (的 [*de*])

BA   marker for *bǎ* constructions and *jiāng* constructions (把 [*bǎ*]/ 将 [*jiāng*])

BEI   passive marker (被 [*bèi*])

CCL   Centre for Chinese Linguistics Corpus

CIT   Conceptual Integration Theory

CL   classifier

CMT   Conceptual Metaphor Theory

CRS   Currently Relevant State (了 [*le*])

CSC   complex stative construction (得 [*de*])

DUR   durative aspect (着 [*zhe*]/ 在 [*zài*]/ 正 [*zhèng*])

FM   fictive motion

GEN   genitive (的 [*de*])

GIS   Geographical Information Systems

HA   homophony avoidance

ICM   idealized cognitive model

NA   not applicable

NOM   nominalizer (的 [*de*])

NP   noun phrase

PFV   perfective aspect (了 [*le*])

VP   verb phrase

ZAI   preposition; be located (在 [*zài*]/ 于 [*yú*])

CHAPTER 1 INTRODUCTION

This thesis investigates fictive motion expressions in Modern Standard Chinese with examples collected from published written texts. An initial categorization is made based on Talmy's classification system (Talmy, 2000a, p. 103), and the established types of fictive motion are analysed from the perspectives of motion event theory (Talmy, 2000b, pp. 213-288) and Conceptual Metaphor Theory (Lakoff & Johnson, 1980). This chapter first introduces fictive motion as a linguistic phenomenon, after which the significance of investigating fictive motion expressions is indicated. The research objectives and methods are briefly justified in the third section, and the layout of the thesis is described in the last section.

1.1 The Phenomenon of Fictive Motion Expressions

Fictive motion expressions are sentences that employ dynamic linguistic forms (motion verbs, directional prepositions, or a combination of both) to describe a static physical entity or scene, as illustrated in (1-1) from Talmy (2000a, p. 99).

(1-1)   This fence goes from the plateau to the valley.

The sentence in (1-1) describes the configuration of a fence and its relative position with respect to the plateau and the valley. The perceived situation is that the relation between the fence and the plateau and the valley is static, and that there is no movement of the fence in reality, but linguistically this static situation is conceptualized as involving a dynamic movement, which is signalled by the employment of the motion verb *go* and directional prepositions *from…to…*. This sentence represents a prototypical fictive motion expression.

1.2 The Significance of Studying Fictive Motion

Fictive motion expressions open a window into our cognitive processes and the relationship between language and cognition. Fictive motion sentences involve an inconsistency between a static entity or scene perceived by human beings and the dynamic linguistic forms encoding it (Talmy, 2000a, p. 104). This inconsistency might seem surprising, but language does not necessarily encode our direct perception of the world, and the mind plays a crucial role in the formation of linguistic meaning (Langacker, 1987, p. 138; 1999; 2005, p. 164). Linguistic meaning resides in both the entities and situations under conceptualization and how we conceptualize them (Langacker, 1987, p. 138; 1990, p. 5; 2005, p. 164). The

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conceptualization process is realized through different construal operations (Croft & Cruse, 2004, pp. 40-69; Langacker, 1987, pp. 99-146; Verhagen, 2007) and various cognitive capacities, such as fictivity (Langacker, 2005; Talmy, 2000a, pp. 99-175), conceptual blending (Fauconnier & Turner, 2002), conceptual metaphor (Lakoff & Johnson, 1980), and metonymy (Kövecses & Radden, 1998). In the case of fictive motion expressions, the dimension where the perceived entity differs from how it is described with language is dynamicity, i.e., the linguistically dynamic conceptualization towards static conceptual contents (stationary physical entities or scenes) through various cognitive processes. Fictive motion expressions are an important case where language and the perceived reality do not match, and they provide evidence concerning the relationship between language and cognition.

The study of fictive motion expressions also contributes to the understanding of spatial cognition. Entities or relationships in space are either static or dynamic, and in most cases, such entities and relationships are faithfully conceptualized and expressed as either static or dynamic. Fictive motion expressions go against the norm and describe static physical entities or relationships as dynamic. One question that arises is whether all static physical entities are equally eligible to be depicted with fictive motion. The investigation of fictive motion can specify the biases towards the types of entities that tend to occur in fictive motion expressions and thus reveal some aspects of how we conceptualize space.

Research on fictive motion events can improve the knowledge of motion events. A motion event can either be a translational motion event or a static locational event (Talmy, 2000a, p. 25). Fictive motion events are associated with both of them with conceptual contents similar to that of a locational event and linguistic forms depicting a translational motion event. The entities or scenes described in fictive motion expressions are static physical entities, but the linguistic constructions are dynamic ones pertaining to motion. The lexicalization patterns in translational motion events have been investigated widely (Beaver, Levin, & Tham, 2010; Ibarretxe-Antuñano, 2004; Slobin, 2004; Talmy, 2000b, pp. 21-288), and the expressions about locational events have also been explored to some extent (Lemmens, 2005; Stosic & Sarda, 2009). When static physical entities are conceptualized and expressed as dynamic ones, the constructions and word choices are very likely to be different from those in translational motion events. The constraints or patterns in terms of linguistic strategies for fictive motion expressions may shed some light on the conceptualization of motion events as a whole.

1.3 Justification for the Current Study

The foundational work on fictive motion has been based mostly on English, and relatively little work has been carried out on other languages (as reviewed in Chapter 2), especially those unrelated to English. This thesis explores fictive motion expressions in modern Chinese with purposes of providing a relatively complete picture of Chinese fictive motion expressions on the one hand and broadening our knowledge of fictive motion in general on the other.

To explore fictive motion in detail requires the specification of different types of fictive motion. Fictive motion is a complex linguistic phenomenon that is instantiated with different types. Among all the categorization systems, Talmy's (2000a, p. 103) is the one most widely recognized and most often followed. Talmy classified fictive motion into six types based on English, namely, coextension paths, emanation paths, advent paths, frame-relative motion, pattern paths, and access paths (ibid). Different types of fictive motion are characterized with different conceptual features (Talmy, 2000a, p. 105), which are associated with different linguistic characteristics and functional motivations.

In this thesis, one perspective from which fictive motion expressions are analysed is motion event theory (Talmy, 2000b, pp. 213-288) because fictive motion events are closely related to motion events. The four core elements composing a translational motion event are Figure, Ground, Motion, and Path (Talmy, 2000b, p. 227). This study selects two aspects, i.e., participants encoded in fictive motion expressions and verbs in fictive motion expressions. Participants include Figure and Ground while verbs are associated with Motion and Path. The semantic information encoded in the verb is an often discussed topic for one subtype of fictive motion expressions, i.e., coextension path expressions. It is hoped that the examination of verbs in Chinese fictive motion sentences will contribute to the discussion of this topic as well as motion event theory. Participants in fictive motion expressions have not been investigated much (as reviewed in Chapter 2). The exploration of the types and properties of participants is helpful in widening our knowledge of spatial cognition.

Another perspective in analysing fictive motion expressions is Conceptual Metaphor Theory (CMT) (Lakoff & Johnson, 1980). CMT allows us to specify the domains which are employed to structure the entities or scenes described with fictive motion expressions. Fictive motion seems to pose a challenge to CMT, namely, why entities with physical forms in space are metaphorically conceptualized as dynamic entities rather than being expressed faithfully

as static ones since they are related to our sensorimotor experiences and thus are fundamental to human beings. This apparent conflict can only be resolved by examining fictive motion in detail, and this perspective will deepen our understanding of cognition.

In this thesis, a classification of fictive motion expressions in Chinese is first made based on the categorization system proposed by Talmy (2000a, p. 103). The initial intuition is that some of the data should be well accommodated by the established types, whereas some of the data may go beyond the established categorization. This expectation comes from two considerations. The first is that Chinese is typologically and genetically a very different language from English and thus may exhibit differences in the types of fictive motion. Another aspect is that Talmy's categorization is based on intuitive data while this thesis uses empirical data, which may present a more complicated picture of fictive motion. This intuition is borne out in this study. Some of the examples fit well into the established types of fictive motion, whereas some of them cannot be accommodated by the established types and thus are treated as new types of fictive motion. This thesis demonstrates the new types of fictive motion and delineates their relationship to the established types.

Chinese fictive motion expressions of the established types are illustrated one by one. Apart from exemplification, they are also analysed from the perspective of Cognitive Linguistics, i.e., motion event theory and Conceptual Metaphor Theory. With regard to motion event theory, the types and properties of participants involved in fictive motion expressions are explored and the semantic elements encoded in verbs are examined. In terms of CMT, specific metaphoric mappings are identified. The theoretical framework and specific research questions are described in Chapter 2.

This study adopts the usage-based approach by manually selecting fictive motion expressions from a set of published written texts. Data based on usage can present a fuller albeit more complicated picture of fictive motion expressions. They can show in a more objective way different categories of fictive motion, semantic domains the participants fall into, semantic elements encoded in verbs, and the types of metaphors involved. Although a fixed set of data cannot include all the usages of fictive motion expressions, the most typical and frequent ones should be covered. Specific data information can be found in Section 3.1 of Chapter 3.

1.4 Organization of the Thesis

The thesis is organized as follows. Chapter 2 first reviews the literature associated with fictive motion and then explains relevant Chinese grammar, after which the theoretical framework is described and the research questions are developed. An analysis of established types of fictive motion is conducted from Chapter 3 to Chapter 5 with Chapter 3 delineating coextension paths; Chapter 4 focusing on various subtypes of emanation paths; Chapter 5 describing advent paths, frame-relative motion, and pattern paths. Chapter 6 discusses new types of fictive motion and their relationship to the established types. Data collection is described at the beginning of Chapter 3. Chapter 7 focuses on the discussion of the findings and theoretical implications pertaining to Figure-Ground organization, naïve physics, and common-sense geography in addition to motion event theory and CMT. Chapter 8 concludes the thesis by answering the research questions, describing the significance of the study, outlining limitations, and proposing further studies.

CHAPTER 2   LITERATURE REVIEW

This chapter includes five sections, namely, the general background of the study on fictive motion, the review of literature on fictive motion, the review on relevant Chinese grammar, the theoretical framework adopted for the analysis, and the research questions. In the first section on the background of fictive motion, I am going to introduce the "overlapping systems model of cognitive organization" (Talmy, 2000a, p. 123), the "pattern of general fictivity" (Talmy, 2000a, p. 100), and fictivity as instantiated in the language system apart from fictive motion expressions. The review on fictive motion includes the definition of fictive motion, the categorization of fictive motion based on English, different approaches in analysing fictive motion expressions, studies on fictive motion in different languages, and the study of fictive motion in Chinese. Three aspects that compose the theoretical framework are delineated, and they are theories on motion events, Conceptual Metaphor Theory, and Talmy's categorization. The specific research questions for this thesis are developed following the theoretical framework.

2.1 General Background

2.1.1 Overlapping systems model

Cognitive linguists maintain that the cognitive systems evolved by human beings, such as the perceptual system, reasoning system, attention system, cultural structure, and language system, are integrated and interpenetrated with one another rather than being independent (Croft & Cruse, 2004, pp. 1-3; Evans & Green, 2006, pp. 40-44; Talmy, 2000a, pp. 15-16). It is believed that each of the cognitive systems is characterized by some unique structural properties that are absent from other cognitive systems; some structural properties are shared by two or more cognitive systems; and some most fundamental structural properties are present among all the cognitive systems (Talmy, 2000a, pp. 15-16). The structural properties possessed by different cognitive systems are overlapping. This is called the "overlapping systems model" (Talmy, 2000a, p. 99).

One cognitive pattern shared by several cognitive systems is the pattern of general fictivity (Talmy, 2000a, p. 100). Apart from fictive motion expressions (as in example (2-1) below) in the language system, fictivity can be found in visual perception and cultural cognition as well. For example, we all have the experience of sitting in a moving train and sensing the scenery

outside running past us (cf. *I sat in the car and watched the scenery rush past me* as in Talmy, 2000a, p. 132). With regard to cultural structure, many cultures have supernatural or mythical creatures, for example ghosts or superman, who can emit powerful light rays from eyes (cf. *Jane looked daggers at John* as in Talmy, 2000a, p. 125), or affect some distant entity by pointing the finger at it (cf. *This arrow points to the town* as in Talmy, 2000a, p. 127).

2.1.2 General fictivity pattern

As a general cognitive pattern, fictivity is described by Talmy as follows.

> The particular manifestation of overlap that we address involves a major cognitive pattern: a discrepancy within the cognition of a single individual. Specifically, this discrepancy is between two different cognitive representations of the same entity, where one of the representations is assessed as being more veridical than the other. We presume that the two representations are the products of two different cognitive subsystems, and that the veridicality assessment itself is produced by a third cognitive subsystem whose general function is to generate such assessments. (2000a, p. 100)

The more veridical representation is characterized as factive, and the other as fictive (Talmy, 2000a). The cognitive pattern that one object is represented in two discrepant ways in terms of veridical degree is termed the pattern of "general fictivity" (Talmy, 2000a, p. 100).

The inconsistency of the two representations occurs usually with respect to one dimension, such as "state of occurrence" and "change of state" (Talmy, 2000a, p. 101). State of occurrence can be represented as either factive absence versus fictive presence[1] or vice versa, and change of state can be conceptualized as either factive stasis versus fictive change (see Section 2.1.3 for the review on fictive change) or vice versa (ibid). One specific dimension of change of state when applied to the physical space-time domain is "state of motion" (ibid). For state of motion we have factive motion versus fictive stationariness and factive stationariness versus fictive motion (ibid). The latter pair occurs more in language due to our cognitive bias towards dynamism (Talmy, 2000a, p. 171). More dimensions will be revealed in the following review.

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[1] This can be illustrated by the visual experience that when you look at a white wall after staring at a piece of red paper for several minutes, you will sense some green entity on the white wall. This green entity is present on the white wall fictively.

2.1.3 Fictive change expressions

Fictivity in the language system is instantiated on various levels. The most often discussed type is fictive motion expressions, which is also the topic of this thesis, as shown in the following example from Talmy (2000a, p. 104).

(2-1)   That mountain range goes from Canada to Mexico.

Sentence (2-1) involves the contrast between the literal meaning of the sentence and what we believe to be the real situation. The literal meaning of the sentence endows the *mountain range* with an animate feature, which is contrary to its meaning based on our belief system that mountain ranges in reality are static. Studies on fictive motion will be reviewed in Section 2.2.

Apart from fictive motion expressions, fictivity is also involved in fictive change expressions. If motion is considered as a special case of change, fictive motion expressions are a subtype of fictive change expressions (Langacker, 1999, p. 84; 2005, p. 175; Talmy, 2000a, p. 101). In some cases, fictive motion is minimally involved in fictive change expressions, as in the following example.

(2-2)   The soil reddens toward the east. (Talmy, 2000a, p. 138)

In (2-2), the fictive change is associated with fictive motion. As the attention scans towards the east, the soil becomes redder. Mental scanning forms a north-south line moving towards the east, during which the change in colour is conceptualized as continuous, which in reality is discrete.

The above sentence involves fictive motion. Fictive change expressions are more frequently produced without reference to fictive motion, as illustrated by the following sentence.

(2-3)   The general's limousine keeps getting longer. (Langacker, 2005, p. 174)

Sentence (2-3) can be explained by the contrast of a "role reading" and an "individual reading" (Sweetser, 1997, p. 118). For the role reading, the entity that has undergone the change (i.e., the subject in the sentence) is not a concrete or specific entity in reality, but a general role that can be filled by many specific individuals. For example, in (2-3), *the general's limousine* might be just a fictive role, which could be filled by many limousines of different lengths, whose value keeps getting larger along the temporal line. With regard to the individual reading, the entity that went through change is a specific entity in reality. In the

case of (2-3), the general's limousine can also be understood as being in the process of manufacturing, and it's getting longer and longer before it is finished. Among these two readings, the role reading seems more natural and reasonable. A fictive change effect emerges when the role reading is adopted.

Another type of fictive change can be illustrated by the sentence below from Talmy (2000a, p. 135).

(2-4)   This rock formation occurs/recurs/appears/reappears/shows up near volcanoes.

In sentence (2-4), the fictive change is from non-existence to existence. No fictive motion is involved in (2-4), and the fictive change involved may be motivated by the unusual character of the entity under discussion (Matsumoto, 1996b).

Fictive change expressions are not included in this study. Matsumoto (1996b, pp. 138-140) summarized three differences between *fictive change* and *fictive motion*, which can be adopted in selecting the data. The first difference lies in what has undergone the change (ibid). The entity that changes in fictive change expressions is the referent of the subject, whereas in fictive motion expressions it is something else (e.g., focus of attention, an imaginary subject, or a specific subject). The second difference concerns the motivation of the two types of expressions (ibid). Fictive change is motivated by the abnormal feature of the entity in question (e.g. seeing the shape of Pac Man as a circular slab with a wedge-shaped block removed from it), while fictive motion is induced by the configuration of the entity under discussion. The third difference can be found in the stages of change involved in the description (ibid). Fictive motion expressions concern all the successive stages of motion, whereas fictive change expressions only pay attention to the final stage of the change, leaving all the intermediate stages overlooked. The fundamental difference between fictive change expressions and fictive motion expressions is that fictive change expressions encompass all the fictive expressions depicting change, including fictive motion expressions as a special case. Therefore, if a fictive expression is independent of motion, it can be a fictive change expression, but it can never be a fictive motion expression.

2.1.4 Fictivity in grammar, communication, and literature

Apart from fictive motion and fictive change, there are other areas in the grammar system where fictivity plays important roles, including the fictive use of the present tense, type specification, generic expressions, structural knowledge description, quantifiers (Langacker,

1999, 2005), case marking of the object in Finnish quasi-resultative constructions (Huumo, 2005), case marking of the predicate adjective in Finnish copulative constructions (Huumo, 2009), etc.

Moving away from sentential grammar, we can say that fictivity also plays a role at the communication level. One example is fictive speech acts, such as irony (Langacker, 1999, p. 90). The inconsistency between the interactive frame evoked by the overt linguistic forms and the intended interactive frame of the speaker could explain sentences containing irony. Another example is fictive interaction (Brandt, 2008; Pascual, 2006a, 2006b). A sentence involving fictive interaction contains one grammatical element in the matrix structure while keeps the personal pronoun, tense, or aspect different from the matrix sentence in the embedded internal structure (Pascual, 2006a), as shown in the following example in (2-5), in which the fictive interaction part *hey I may find some evidence here that excludes him* serves as the object clause of the matrix sentence, but both its subject and tense are different from the matrix sentence. This direct speech with a first person singular subject and present tense functions to demonstrate the inner thought of the subject (*they*) in the matrix sentence from the speaker's point of view.

(2-5)   They didn't quit. They kept going. Knowing that, *hey I may find some evidence here that excludes him*. (Pascual, 2006a, p. 252)

It should not be surprising that literary languages contain many fictive expressions, since literary works are full of stories, metaphors, allusions, hyperboles, sarcasm, puns, etc. Fictive literary languages focus not only on the message-bearing function of language, but also on the aesthetic effect brought about by the fictive mode (Suhor, 1975, pp. 367-369). Usually the contents coded by fictive literary expressions can also be expressed alternatively in a factive way. Fictive motion expressions in literary works are quite abundant. See the following example from a poem by John Gould Fletcher:

(2-6)   Where rise sharp-fretted golden-roofed cathedrals/Exultantly, and split the sky with light. (as cited in Hamilton, 2004, p. 473)

The reason behind those rhetorical uses of motion verbs, such as *rise* and *split* in (2-6) could be that the author wished to adopt a more dynamic tone to make the words more impressive. The dynamic words in the literary languages are chosen for rhetorical purposes.

2.2 Fictive Motion Expressions

2.2.1 The term fictive motion

This thesis will adopt the term *fictive motion* from Talmy (2000a) to refer to FICTIVE MOTION[2].

Before FICTIVE MOTION was regarded as an independent study object by cognitive linguists, it has been noticed but has not been analysed thoroughly. Sentences like *the post office is over the hill* have been explained simply as involving a reference point through which one could get to the location in question (Bennett, 1975, p. 35). The most often mentioned type is fictive motion expressions like the following sentence (Talmy, 2000a, p. 99).

(2-7)   This fence goes from the plateau to the valley.

Instead of being analysed, they were descriptively labelled as "directional extent sentences" in Bennett (1975, p. 42), and "virtual motion" in Talmy (1983, p. 236). The verbs in those sentences were categorized as "pseudo-motional locatives" in (Dowty, 1979, p. 67) and "meander verbs" in Levin (1993, p. 256).

The concept FICTIVE MOTION was first studied systematically with the name *fictive motion* in Talmy (1996, p. 214). *Fictive motion* was further used in Talmy (2000a, p. 103). In addition to *fictive motion*, FICTIVE MOTION has been labelled as *virtual motion* (Langacker, 1999, p. 81), *subjective motion* (Langacker, 1986, p. 464; Matsumoto, 1996a, p. 359; 1996b, p. 136; 1996c, p. 184), and *abstract motion* (Langacker, 1986, p. 467; 1987, pp. 168-173), but the scope of each term varied in different works. Langacker (1999, p. 81) maintained that *virtual motion* could be used interchangeably with *fictive motion*, *subjective motion* and *abstract motion*. However, earlier in Langacker (1986, p. 463), he defined *abstract motion* as more encompassing, covering not only *subjective motion* (which is similar to *fictive motion* in Talmy's sense), but also metaphorical fictive motion expressions, such as *the concert went from midnight to 4pm*, as well as all the expressions sharing the image schema of motion, even sentences describing physical movement through space. Later, he employed *fictive motion* and *virtual motion* interchangeably (2005, pp. 175-177). Although Matsumoto (1996a, 1996b, 1996c) chose to adopt *subjective motion* instead of *fictive motion*, he still defined his

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[2] FICTIVE MOTION is capitalized here to refer to the linguistic phenomenon rather than a certain linguistic label of this phenomenon.

study scope using Talmy's terms and categorizations, such as *coverage path* (or *coextension path* in Talmy, 2000a, p. 138) and *access path* (1996a, 1996b). This interwoven network of terms adopted for the concept FICTIVE MOTION is shown in Table 2.1.

Table 2.1   Different terms for FICTIVE MOTION

Talmy	(1983)	(1996)	(2000a)
	virtual motion	*fictive motion*	*fictive motion*
Langacker	(1986)	(1999)	(2005)
	subjective motion (*abstract motion* is a hypernym containing everything sharing the motion schema)	*virtual motion*, or *fictive motion*, or *subjective motion*, or *abstract motion*	*fictive motion* or *subjective motion*
Matsumoto	(1996a)	(1996b)	(1996c)
	subjective motion; *coverage path*; *access path*	*subjective motion*; *access path*; *coverage path*	*subjective motion*; *access path*; *orientation path*

This study will adopt the term *fictive motion* because it can be seen from the above review that the demarcation line of fictive motion is the clearest and adopting the term *fictive motion* can avoid confusion. Another reason is that this study is going to make a categorization of Chinese fictive motion expressions following Talmy's classification.

2.2.2 The categorization by Talmy

Talmy was the first person to produce a comprehensive categorization of fictive motion based on English (Talmy, 1996, 2000a). In these studies, he categorized the expressions into six types based on the following parameters.

a. Factive motion of some elements need not/must be present for that fictive effect.

b. The fictively moving entity is itself factive/fictive.

c. The fictive effect is observer-neutral/observer-based---and, if observer-based:

i. The observer is factive/fictive.

ii. The observer moves/scans.

d. What is conceived as fictively moving is an entity/the observation of an entity.

(Talmy, 2000a, p. 105)

These parameters are the standards used here to categorize fictive motion expressions in Chinese. This section only explains each parameter, and the detailed values for each type of fictive motion will be described in Section 2.4.3 on the theoretical framework.

Parameter (a) concerns the necessity of the existence of some kind of factive motion for the linguistic conceptualization of fictive motion. For some fictive motion expressions, the occurrence of fictive motion does not require any element of factive motion, as in sentence (2-8) below.

(2-8)   The cliff wall faces . . . past the valley. (Talmy, 2000a, p. 108)

In sentence (2-8), what is conceptualized as fictively moving from the cliff wall to the valley is some intangible entity. The cliff wall is treated here as an object with a face, and associated with that, something intangible moves from the face side of the cliff wall to the valley. No factive motion is involved in this sentence. But for some types of fictive motion expressions, factive movement of some sort must exist, as illustrated in the following sentence.

(2-9)   I sat in the car and watched the scenery rush past me. (Talmy, 2000a, p. 132)

In (2-9), the actual movement of the car is indispensable for the conceptualization of the fictive motion on the part of the scenery, so the factive motion is absolutely necessary for this sentence. Thus we see that parameter (a) is at least one reason the two sentences above are categorized differently.

Parameter (b) differentiates whether the moving entity in a fictive motion expression is factive or fictive. In (2-10), the moving entity is factive. The movement structured by *goes…from…to…* is fictive, but the fictive moving entity (the fence) under conceptualization is factive.

(2-10)   The fence goes . . . from the plateau to the valley. (Talmy, 2000a, p. 138)

However, in some other fictive motion sentences, such as sentence (2-11), the moving entity is not a concrete object. The *arrow* in sentence (2-11) does not itself move fictively, what is conceptualized as in fictive movement is an imagined line moving along the direction indicated by the arrow. Sentence (2-10) and (2-11) are thus different in terms of parameter (b).

(2-11)   The arrow on the signpost pointed toward . . . the town. (Talmy, 2000a, p. 109)

Parameter (c) depicts the relationship between the observer and the scene observed. If the fictive effect is observer-neutral, then the scene under observation will be conceptualized as involving fictive motion by any observer, as for sentence (2-8) above. On the other hand, if

the fictive effect is observer-based, the fictive motion impression must be tied to a particular observer in a certain situation, as in (2-9). In sentence (2-9), the observer *I* is factive, and the observer is moving rather than scanning. In sentence (2-12) below, the observer is fictive (either an imagined entity or the focus of attention), and the fictive motion effect is the result of the moving or scanning of the fictive observer. This is the third parameter serving to distinguish different fictive motion expressions.

(2-12)   The bakery is across the street from the bank. (Talmy, 2000a, p. 137)

Parameter (d) concerns whether the conceived fictively moving thing is an entity or the observation of an entity. In sentence (2-13), the fictively moving thing is the line of paint spots, which consists of actual objects instead of the observation of some entity, but in sentence (2-12), the fictively moving effect is the result of the observation of an entity because the speaker either imagines a fictive abstract entity moving along the path or scans along the path with the focus of attention. This is the last distinctive parameter.

(2-13)   As I painted the ceiling, (a line of) paint spots slowly progressed across the floor. (Talmy, 2000a, p. 129)

Using different combinations of values of the above parameters, Talmy categorized fictive motion expressions into emanation paths, pattern paths, frame-relative motion, advent paths, access paths, and coextension paths. Talmy's categorization of fictive motion can be generally summarized in Figure 2.1:
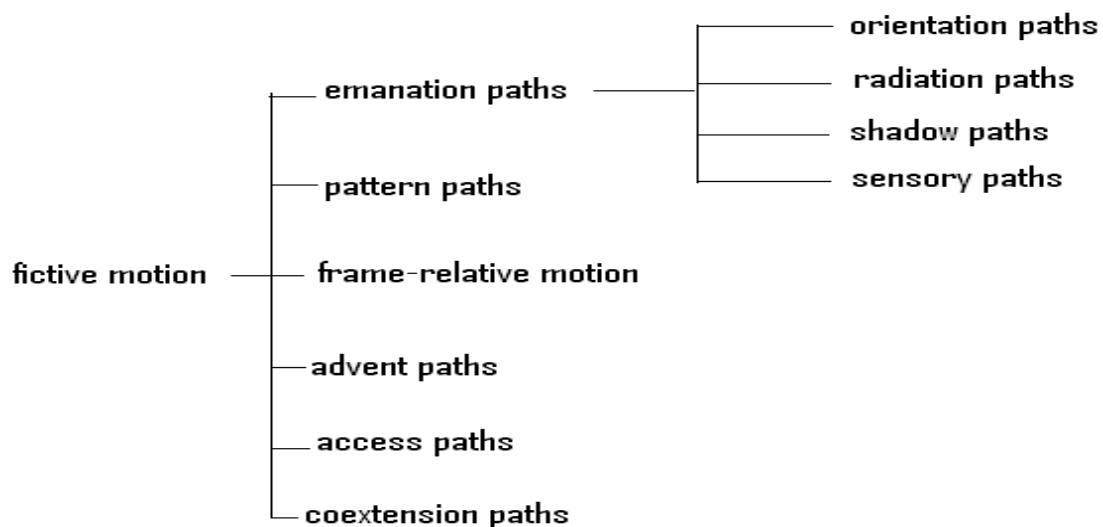
Figure 2.1 Fictive motion categorization

The values for different types of fictive motion expressions and their associated characteristics will be explained in Section 2.4.3.

2.2.3 Cognitive approaches

One perspective for understanding the cognitive operation of fictive motion expressions is proposed by Langacker (Langacker, 1986, 1987, 1990, 1999, 2005). The main reason why Langacker terms FICTIVE MOTION as *subjective motion* is because he attributes the motion aspect of fictive motion expressions to the subjective motion on the part of the conceptualizer.

Langacker analysed two types of fictive motion expressions. The first type, *coextension paths* in Talmy's terms, is shown in the following example.

(2-14)   The highway goes from Mexico to Canada. (Langacker, 1999, p. 82)
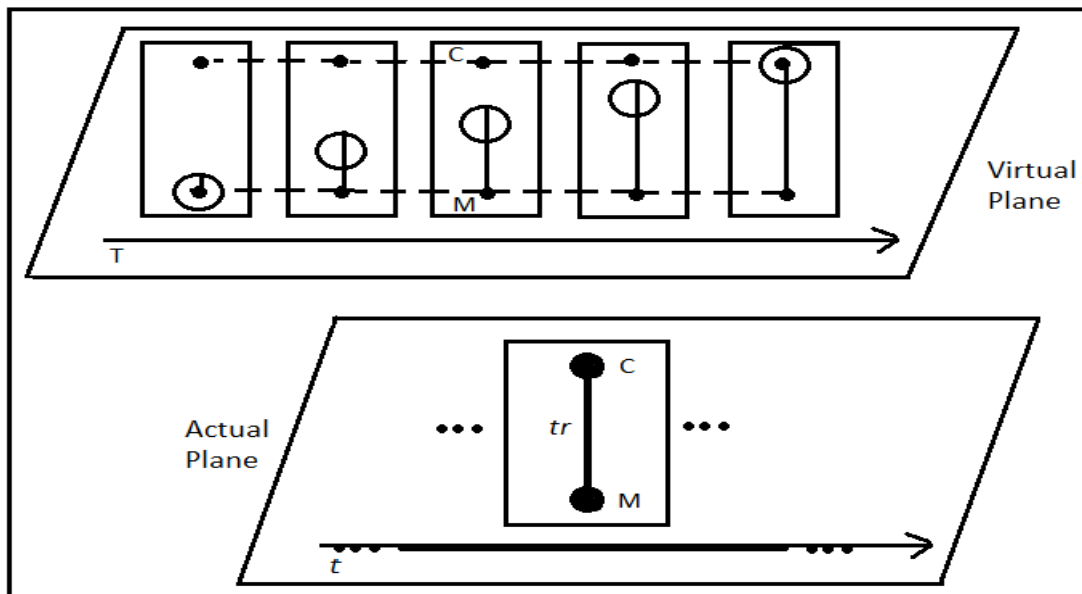
Figure 2.2 Actual plane and virtual plane

Sentence (2-14) involves two conceptualizations (see Figure 2.2, adapted from Langacker, 1999, p. 83). In the actual plane, the relation between the highway and Mexico and Canada is conceptualized as a continuously stable situation through conceived time[3] *t*. The virtual plane involves subjective motion on the part of the conceptualizer. Through processing time[4] *T*, the conceptualizer mentally scans the path along the highway from Mexico to Canada and

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[3] *Conceived time* is defined as the "time as an object of conceptualization. The component states of a process are distributed along this axis." (Langacker, 1991, p. 546)

[4] *Processing time* is defined as the "time as a medium of conceptualization, an axis along which cognitive activity takes place." (Langacker, 1991, p. 551)

superimposes all the locations scanned simultaneously until the full configuration is built up (Langacker, 1999, p. 83). Thus the virtual conceptualization is realized through mental scanning (ibid).

The second type is *access paths* in Talmy's terminology, as illustrated by the following sentences.

(2-15)   The Linguistics Hall of Fame is across the plaza, through the alley, and over the bridge. (Langacker, 1987, p. 170)

(2-16)   There was a fire last night across the river, through the canyon, and over the mountain. (ibid)

The motion in the above two sentences can be either potential or hypothetical or even subjective (Langacker, 1987, p. 171). When (2-15) is produced in order to give directions for a disoriented tourist, the movement is potential, and the mover is the potential addressee (ibid). But there are many cases where the mover and the movement are hypothetical if the speaker is merely specifying the location of the entity through describing the path to reach it. Sentence (2-16) is such an example. Normally nobody wants to go to the location where there was a fire. In some other cases, the mover and the movement are even subjective when the speaker just mentally traces the path to the entity so as to specify its position (ibid).

Although he does not focus on the detailed categorization of fictive motion expressions, Langacker does distinguish two types of fictive motion expressions: perfective and imperfective ones (Langacker, 2005, p. 175), as illustrated by the following two sentences.

(2-17)   The path is rising quickly as we climb. (ibid)

(2-18)   The path rises quickly near the top. (ibid)

They are different in both grammatical representation and cognitive motivation. In perfective sentences, such as sentence (2-17), the speaker takes a local view to scan the continuously extended path (Langacker, 2005, pp. 175-177). The different portions of the path that come into the speaker's eyes from moment to moment are fictively conceptualized as a single entity moving upwards (ibid). It can be contrasted with imperfective fictive motion expressions like sentence (2-18). In this kind of expression, the speaker adopts a global view to scan the path and mentally builds up the overall configuration of the path (ibid). This mental construction of the overall configuration process needs to be completed through processing time (ibid). Nothing actually moves, and what moves is the subjective motion along the path during the process of reaching the complete configuration of the path (ibid). The similarities of the two

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kinds of expressions are that both of them are embodied, originating from the experience of moving in space or watching others doing so (Langacker, 2005, p. 177).

A similar two-way categorization pattern is made in Matsumoto, as shown below (Matsumoto, 1996c, p. 204).

(2-19)   The highway passes through a tunnel here.

(2-20)   The highway I was driving on passed through a tunnel then.

The moving entity and time of movement are both arbitrary in (2-19), whereas they are specific in (2-20).

Langacker's mental scanning explanation of fictive motion expressions is supported by a series of experimental studies, including narrative understanding tasks (Matlock, 2004b), drawing studies (Matlock, 2006), time and motion surveys (Matlock, 2010; Matlock, Holmes, Srinivasan, & Ramscar, 2011; Matlock, Ramscar, & Boroditsky, 2003; Matlock, Ramscar, & Boroditsky, 2005), eye-movement studies (Matlock & Richardson, 2004; Mishra & Singh, 2010; Richardson & Matlock, 2007; Singh & Mishra, 2010), fMRI-studies (Saygin, Mccullough, Alac, & Emmorey, 2010; Wallentin, Lund, Østergaard, Østergaard, & Roepstorff, 2005; Wallentin, Østergaard, Lund, Østergaard, & Roepstorff, 2005), and Transcranial Magnetic Stimulation (TMS) studies (Cacciari et al., 2011). Generally speaking, the results of those experiments confirm that the processing of fictive motion expressions involves the mental simulation of motion.

Langacker (1999, p. 81) proposes that the way he analysed fictive motion expressions from the perspective of mental scanning doesn't contradict with other perspectives, such as Conceptual Integration Theory (CIT) and Conceptual Metaphor Theory. Those theories are involved to different degrees in different cases. Since CMT is one component of the theoretical framework for this thesis, it will be reviewed in Section 2.4.2 below.

CIT was developed by Gilles Fauconnier and Mark Turner (Fauconnier & Turner, 2002). To clearly illustrate how it explains fictive motion expressions, several elements comprising the blending is shown below through a basic blend diagram (adapted from Fauconnier & Turner, 2002, p. 46):
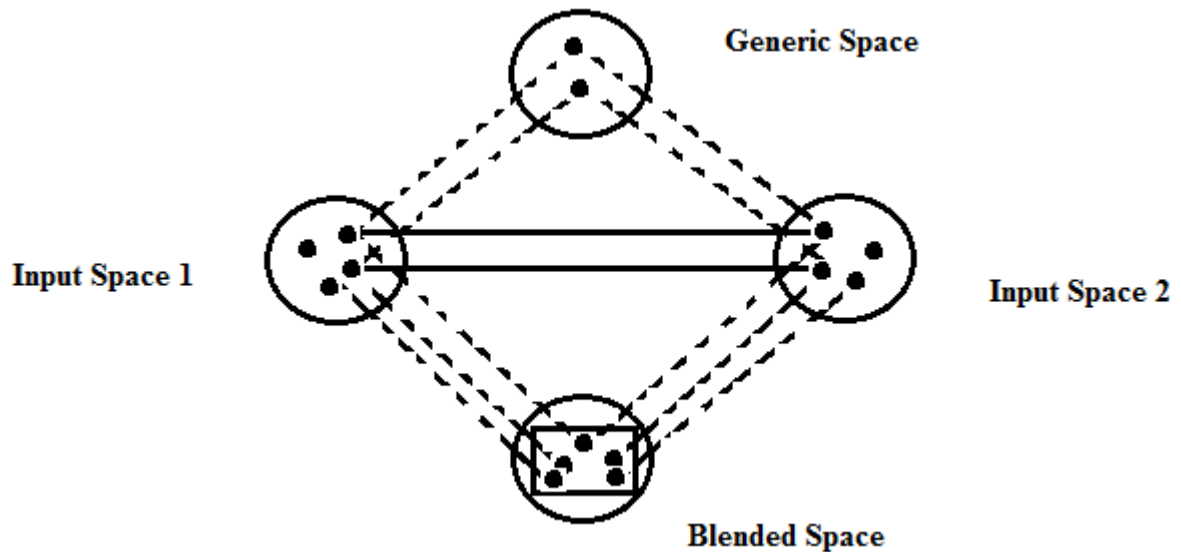
Figure 2.3 The basic diagram of blends

Figure 2.3 demonstrates the principal features of CIT. The circles represent mental spaces, which "are small conceptual packets constructed as we think and talk, for purposes of local understanding and action" (Fauconnier & Turner, 2002, p. 40). There are two input spaces whose common features are captured in the generic space (Fauconnier & Turner, 2002, p. 47). The blended space develops emergent structure that contains not only the generic structure in the generic space and more specific structures in the two inputs but also newly emerged structures generated after cognitive operations (ibid). The solid lines stand for cross-space mappings between the two input spaces, and the dotted lines represent connections between different spaces (ibid). The solid square in the blended space indicates emergent structure, which is generated in three ways: "through composition of projections from the inputs", "through completion based on independently recruited frames and scenarios", and " through elaboration (running the blend)" (Fauconnier & Turner, 2002, p. 48).

Being a central and fundamental capacity of our minds, conceptual blending plays an essential role in producing creative linguistic expressions, including fictive motion sentences (Fan, 2014b; Fauconnier, 1997, pp. 177-181; Fauconnier & Turner, 2002, pp. 376-380; W. Han, 2009). Below are two examples of how conceptual blending works in the production of fictive motion sentences.

(2-21)   The mountain range goes from Mexico to Canada. (Fauconnier & Turner, 2002, p. 378)

In (2-21), the blending network has two input spaces. One input space has the static mountain range lying between Mexico and Canada, and the other input space involves a general frame

where a trajector moves along a path from a beginning point to an end point. Cross-space mapping connects certain structures in the two input spaces, such as the beginning and end points in one input space and Mexico and Canada in another, and the trajectory in one input space and the mountain range in another. However, the trajector in the general frame input space has no counterpart in the static mountain range space (ibid). The mountain range is dynamic in neither the input space nor the blended space. Sentence (2-21) that sets up this blend assigns the trajectory, which is the mountain range, to the subject position, and the movement of a trajector to the verb (ibid). Encoding the trajectory in the subject position and the movement in the verb position can highlight the target topic, which is the mountain range, as well as evoke the trajector in a metonymic way (ibid). The meaning of fictive motion expressions does not reside in the blended space alone, but rather in the dynamic network of the blending process (Coulson & Oakley, 2005).

(2-22)   The palm trees clustered together around the oasis. (Fauconnier & Turner, 2002, p. 379)

There are again two input spaces for the sentence in (2-22). The static input space involves an oasis surrounded by palm trees. In the dynamic space some trajectors move towards a landmark from some more dispersed locations. Sentence (2-22) differs from sentence (2-21) in that in (2-22), the trajectors from the dynamic input space have their counterparts in the static input space, but the starting point of the trajectory (those dispersed locations) in the dynamic input space has no correspondence in the static input (Fauconnier & Turner, 2002, pp. 379-380). In sentence (2-21), it is the trajector rather than the beginning point of the trajectory that has no counterpart in the static input space. In sentence (2-22), the trajectors in the dynamic input space correspond to the palm trees in the static input, and the end point of the trajectory in the dynamic space corresponds to the oasis in the static input, but in the static input space there is nothing corresponds to the dispersed locations in the dynamic space. The stationary scene in the static input space is incorporated as the end state of the movement in the dynamic space (Fauconnier & Turner, 2002, p. 380). Again, the fictive motion sense in sentence (2-22) resides in the whole blending process.

Sometimes there are other similar ways to encode the same static scene apart from using fictive motion expressions. Sentence (2-21) can be transformed into *the mountain range lies between Mexico and Canada*, and sentence (2-22) can also be expressed as *the palm trees surround the oasis*. Why do we spend seemingly gratuitous efforts on increasing the complexity of the expression by involving motion in the blend? The reason is that involving

motion in blending helps to enhance the human-scale quality of the scene (Fauconnier & Turner, 2002, pp. 378-380). Situations with human-scale quality can be easily perceived or acted upon, and they can be immediately apprehended by human beings (ibid). One of the basic human-scale structures is human action with motion and sometimes intentionality in physical space and time (ibid), which is often the motivation in the case of fictive motion expressions. Sentence (2-21) describes a static scene using dynamic terms so that the static state is transformed into an event. The blended space is now more human-scale in that there is a simple and clear path along which a trajector moves in human-scale time.

(2-23)   Trees climb the hills towards the Golan and descend to test their resolve with the desert. (Fauconnier & Turner, 2002, p. 349)

Sentence (2-23) goes one step further in that it blends a non-intentional event with intentionality and transforms an event into an action (ibid). Such a blend creates a human-scale story with familiar frames. Although complex blending may increase the complexity of cognitive operations, it is more congenial for human beings to process an integral human-scale action (Fauconnier & Turner, 2002, pp. 378-379).

Apart from CIT, the cognitive processing of fictive motion expressions should also take into consideration conceptual metonymy. In some cases, fictive motion expressions reflect metonymic thinking (Caballero, 2006, p. 161; 239; Fauconnier, 1997, p. 178; Fauconnier & Turner, 2002, p. 378; Lakoff, 1987, pp. 106-107). See the following examples.

(2-24)   The mountain range goes from Mexico to Canada. (Fauconnier & Turner, 2002, p. 378)

(2-25)   Customers descend to the store from the parking levels by elevators or by stairs that scissor down through the three-story space. (Caballero, 2006, p. 161)

As discussed previously, sentence (2-24) is a typical fictive motion sentence. The subject *the mountain range* does not move, but is combined with a motion verb and directional prepositions. The mountain range is actually the trajectory of the moving entity described by the motion verb and directional prepositions. The trajectory takes the subject position so that on the one hand, the topic (the mountain range) could be highlighted, and on the other, the typical trajectors could be evoked metonymically (Fauconnier & Turner, 2002, p. 378).

The *stairs* in sentence (2-25) are usually stationary in reality. The fictive motion sense of this sentence is conveyed by the verb *scissor* and directional prepositions *down* and *through*. Although *scissor* is used as a verb, the only thing that makes it reasonable in the sentence to

describe the stairs is the similarity between the prototypical shape of a pair of scissors and the configuration of the stairs (Caballero, 2006, p. 239). It is the shape of the scissors[5] that stands for the shape of the stairs rather than other traits of the scissors (ibid), so *scissor* is used metonymically here in (2-25).

Other possible metonymies involved in the interpretation of fictive motion expressions include MOTION ALONG A PATH FOR THE PATH and MANNER OF MOTION ALONG A PATH FOR THE CONFIGURATION OF THE PATH (W. Han, 2009, pp. 46-50; Matlock, 2004a, pp. 231-232), as shown below.

(2-26)   The blackboard goes all the way to the wall. (W. Han, 2009, p. 47)

(2-27)   The footpath staggers from the bar to the outhouse. (Matlock, 2004a, p. 231)

The interpretation of the sentence in (2-26) involves the metonymy MOTION ALONG A PATH FOR THE PATH. The depiction of motion along the path could have the effect of highlighting the path, which in this case, is the length of the blackboard (W. Han, 2009, p. 48).

Sentence (2-27) involves the metonymy MANNER OF MOTION ALONG A PATH FOR THE CONFIGURATION OF THE PATH (Matlock, 2004a, pp. 231-232). There is no movement of staggering in the situation described by sentence (2-27). The manner verb *stagger* is used to indicate a potential or possibly occurring movement form along the path (ibid). In this sense, *stagger*, as a manner verb, is employed here to represent the configuration of the footpath (ibid).

2.2.4 Non-cognitive approaches

From the perspective of functional grammar, the linguistic labels in talking about the world can be categorized as participants, circumstances, and processes, among which the process is the core of the clause, as illustrated by the following example (Thompson, 2013, pp. 91-92).

(2-28) They   slowly   unlocked   the front door.
        participant   circumstance   process   participant

According to (Thompson, 2013, p. 92), the process is realized by verbs or phrasal verbs. There are three main types of processes: material processes, mental processes, and relational

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[5] The same analysis of metonymy can be applied to the sentence "the building fans out" (Caballero, 2006, p. 239), but different people may exhibit differences over the extent to which such sentences involve metonymy.

processes (Thompson, 2013, pp. 94-104). Material processes involve physical actions, such as running and walking (ibid). Mental processes are involved in those clauses describing the internal world of our minds, such as thinking, seeing, and understanding (ibid). Relational processes pertain to the relationship between two concepts, such as *the bread is stale* and *his immediate objective was the church* (ibid). From the perspective of such a framework, the situations expressed by fictive motion expressions belong to relational processes but linguistically they are encoded by terms used to describe material processes (Halliday, 2004, p. 216; Thompson, 2013, p. 120), as shown in (2-29) below.

(2-29)   Hope Street runs between the two cathedrals. (Thompson, 2013, p. 120)

Semantically speaking, the sentence is about the geographical relationship between two locations, but linguistically the verb *run,* which is normally used to depict physical actions, is employed.

It has been pointed out that this kind of linguistic phenomenon can frequently be observed in tourist brochures, whose purpose is to provide the description of static locations with a more dynamic sense and thus make it more attractive and colourful (Thompson, 2013, pp. 120-121). This is especially the case when there are many choices of how to encode one entity or situation (ibid).

In Bennett (1975), two types of fictive motion expressions, namely, *access paths* and *coextension paths* in Talmy's terms, were discussed.

(2-30)   The post office is over the hill. (Bennett, 1975, p. 35)

(2-31)   A car appeared from over the hill. (ibid)

Sentence (2-30) involves an access path. It is locative in that semantically it describes the location of the post office, while (2-31) is directional because it depicts the specific change of the location of a car (ibid). Locative sentences like (2-30) specify a certain location by identifying the path an entity would have to take to get there (Bennett, 1975, p. 36). They contain directional expressions and require a 'deictic' interpretation (ibid).

(2-32)   The Mall goes from Buckingham Palace to Trafalgar Square. (Bennett, 1975, p. 40)

Sentence (2-32) is an expression involving a coextension path. It depicts a state involving no change of position, but it contains two directional prepositions, which are usually used in directional sentences describing events (ibid). Sentence (2-32) is either an extent sentence or a locative sentence since it can answer both of the questions below.

(2-33)   How long is the Mall? (ibid)

(2-34)   Where is the Mall? (ibid)

Question (2-33) is about the extent of the Mall and (2-34) asks for the location of the Mall. Therefore, sentences like (2-32) should be "ascribed two alternative semantic representations" (Bennett, 1975, p. 40).

In Dowty (1979, p. 67), verbs used in sentences involving coextension paths are identified as "pseudo-motional locatives", such as *run*, *flow*, and *meander*. They are often used in describing roads and rivers. They have the name "meander verbs" in (Levin, 1993, p. 256). Levin provided more examples of such kind of verbs, including *cascade*, *climb*, *crawl*, *cut*, *drop*, *go*, *meander*, *plunge*, *run*, *straggle*, *stretch*, *sweep*, *tumble*, *turn*, *twist*, *wander*, *weave*, and *wind* (ibid), as shown in the following two examples (ibid). They are all verbs of motion but are employed here to describe a long, continuous object, such as the river in (2-35) and the stream in (2-36).

(2-35)   The river runs from the lake to the sea.

(2-36)   The stream winds/twists/crawls through the valley.

Jackendoff (1983) analysed orientation paths and coextension paths with regard to whether they are an event or a state.

(2-37)   a. The sign points to Philadelphia. (Jackendoff, 1983, p. 168)
         b. The house faces away from the mountains. (ibid)
         c. The cannons aim through the tunnel. (ibid)

(2-38)   The highway extends from Denver to Indianapolis. (ibid)

According to Jackendoff (1983, pp. 170-174), there are mainly two ways to examine whether an expression is about an event or a state. One is to see whether the sentence can answer this kind of questions "What happened/occurred/took place was (that)…" (Jackendoff, 1983, p. 170), and the other is to see whether simple present tense is used to express present time (Jackendoff, 1983, p. 171). Sentences expressing events tend to be able to answer the above question and use present progressive aspect, whereas sentences encoding states prefer simple present tense and usually are inappropriate to answer the above question (Jackendoff, 1983, pp. 170-171). Based on these two principles, orientation path and coextension path expressions are about states rather than events (Jackendoff, 1983, p. 172). Orientation path sentences like those in (2-37) describe the direction an entity is pointing. The prepositional

phrases in sentences in (2-37) usually have the function of representing paths, but here they are used to specify the orientation of the subject (Jackendoff, 1983, pp. 172-173). They are not suitable answers to the above question, and simple present tense is employed to indicate the continuous state (ibid). Sentence (2-38) is a coextension path expression. The highway in (2-38) occupies the entire path from Denver to Indianapolis at any given time, and the sentence passes the test for state expressions (Jackendoff, 1983, pp. 173-174). The treatment of the sentences similar to the above ones as expressions about states indicates that the verbs contained in them have lost the basic sense of motion. This analysis is challenged from the perspective of Cognitive Linguistics due to its lack of cognitive evidence and failure in satisfying the principle of descriptive adequacy because only fictive motion sentences with path verbs were discussed (Tao & Zhang, 2014).

2.2.5 Fictive motion in different languages

English is the most studied language in terms of fictive motion expressions. However, there are a few fictive motion studies based on languages other than English, such as Japanese (Matsumoto, 1996a, 1996c), Spanish (Cifuentes-Férez, 2014; Rojo & Valenzuela, 2003, 2009), Serbian (Stosic & Sarda, 2009), French (ibid), Thai (Takahashi, 2000, 2001, 2002, 2005), Italian (Cappelli, 2012), Estonian (Taremaa, 2013), and Chinese (Fan, 2011; Hilohumi, 2005; X. Li, 2009; Y. Li, 2011a; Tao & Mao, 2011; L. Wang, 2008; Yao, 2007), etc. This section will focus on the studies of fictive motion in languages other than Chinese.

One avenue for research on fictive motion concerns the encoding of manner and path information. Matsumoto has proposed two conditions constraining fictive motion expressions based on the comparison of English and Japanese, as shown below.

a. The path condition: Some property of the path of motion must be expressed.

b. The manner condition: No property of the manner of motion can be expressed unless it is used to represent some correlated property of the path. (Matsumoto, 1996c, p. 194)

For the path condition, it is infelicitous to say "the road began to run" (Matsumoto, 1996c, p. 195) without specifying any path information. We have to include some path elements like "the road began to run along the shore" (ibid). For manner information, "the road… zigzagged through…the forest" (Matsumoto, 1996c, p. 196) is more appropriate than "the

road … speeds … through the park" (ibid), because *zigzag* is helpful in depicting the shape of the road. However, these two conditions seem to apply in the majority of cases rather than function as absolute rules (Fan, 2011, p. 109; Matlock, 2004a, pp. 231-232). That the path and manner conditions are shared generally by two genetically and areally unrelated languages indicates that they might result from the cognitive mechanism underlying subjective motion expressions (Matsumoto, 1996c, p. 203). Path information is obligatory because the linear objects under discussion are conceptualized as a path (ibid). The salient expression of path information is the motivation for using fictive motion expressions (ibid). Although a moving entity (sometimes the focus of attention and sometimes an imagined concrete thing, such as a person) is always evoked mentally in processing fictive motion expressions, it is suppressed on the linguistic level, and overt manner information would make the moving entity salient, which will contradict the requirement of suppressing the moving entity (ibid).

There is evidence indicating that the two conditions are generally applicable to Spanish (Rojo & Valenzuela, 2003, p. 141). Based on the motion event theory (as introduced below in Section 2.4.1), English is a satellite-framed language that is freer in encoding path and manner information. On the other hand, Spanish is a verb-framed language, which is more constrained in expressing path and manner information. According to the two conditions proposed by Matsumoto, fictive motion expressions in general reject manner information but must contain some path information. As a result, when English fictive motion expressions are translated into Spanish, much less path and manner information is removed compared with translations of physical motion expressions (Rojo & Valenzuela, 2003, p. 134). It is the manner condition that reduces the manner information in English so there is not much manner information in the source language, and it is the path condition that forces the translator to maintain the path information in the target language since it is what a fictive motion expression is all about (Rojo & Valenzuela, 2003, pp. 133-134). Similar results were observed in a study comparing two comparable corpora composed of guidebooks: English (satellite-framed language) and Italian (verb-framed language) (Cappelli, 2012, p. 28). With regard to the manner condition, it is found that verbs expressing non-path-related manner information are harder for Spanish speakers to process (Rojo & Valenzuela, 2009, p. 253).

Relevant here is a study comparing the strategies employed in expressing static location in two typologically different languages in terms of motion events, namely, French and Serbian (Stosic & Sarda, 2009). Serbian is a satellite-framed language that is capable of encoding

more manner information while French is a verb-framed language in which manner is less expressible. It is found that, in expressing locative motion events, Serbian uses more sentences containing posture verbs (which are assumed to be equivalent to manner verbs in translational motion events) and fewer fictive motion expressions compared with French (Stosic & Sarda, 2009, pp. 50-51). This indicates that in the domain of static location, manner is more salient in satellite-framed languages (Serbian) than in verb-framed languages (French) (ibid). It is also suggested that highly manner-salient languages tend to be limited in the use of fictive motion expressions and vice versa (Stosic & Sarda, 2009, p. 57). This study is interesting in that it echoes the discussion of verbal predicate patterns in Chinese fictive motion expressions in Section 7.2.2.

Also related both to motion event theory and fictive motion theory is a study comparing the encoding of complex path information for visual paths in four typologically different languages, namely, English and Russian as satellite-framed languages, and Spanish and Turkish as verb-framed languages (Slobin, 2009). It is proposed that for motion event expressions, satellite-framed languages tend to encode more complex path information since the grammatical element satellite is added to the main verb; while verb-framed languages tend to be constrained in expressing complex path information because the path information is encoded in the main verb (Slobin, 2004, pp. 239-240). It is found that these features seem to carry over to visual paths in that the encoding of complex path information is more constrained for expressing visual paths in verb-framed languages, despite the fact that for visual paths, the verb-framed languages under discussion adopt the strategy similar to satellite-framed languages, i.e. a verb of looking plus an element encoding path (Slobin, 2009, pp. 211-212). Similarly, it is observed in a study comparing visual path expressions in English and Spanish that the linguistic strategies employed in the domain of physical motion are carried over to the domain of visual perception in that English uses more and richer manner verbs than Spanish (Cifuentes-Férez, 2014, p. 234), and that English is better at encoding complex combinations of Path plus Ground (Cifuentes-Férez, 2014, p. 226).

Following Talmy's categorization, a few detailed studies on specific types of fictive motion were conducted, out of which emerged some interesting results. One example is the comparison of English coextension paths (labelled as *coverage paths* in the original article, e.g. *the fence goes from the plateau to the valley*) and access paths (e.g. *the bakery is across the street from the bank*) (Matsumoto, 1996a), in which the two types of paths were compared in terms of the expressiveness of the semantic information in grammatical forms,

including information about path, manner, duration of movement, and the moving entity that motivates the dynamic expressions. The forms, functions of, and semantic constraints on Thai access path expressions were explored (Takahashi, 2001). Another example is the investigation of emanation fictive motion expressions in Thai (Takahashi, 2000, 2002). Emanation paths in Thai were classified in terms of ICM and semantic types, and the syntactic strategies in encoding emanation paths were also examined (Takahashi, 2000). Sensory paths were explored in terms of the semantic types, conceptual solidarity (the degree of abstractness), etc. in (Takahashi, 2002). Radiation paths have been investigated in terms of what types of semantic information is encoded in the verbs and the conceptual metaphors involved (Kemmer, 2014).

2.2.6 Chinese fictive motion expressions

As reviewed earlier, fictive motion is categorized into six types based on English (Talmy, 2000a, p. 103). Following this categorization, Chinese is also shown to have all the six types (X. Li, 2009, pp. 131-132; Tao & Mao, 2011, pp. 117-119). Specific types of fictive motion in Chinese are explored, such as access paths (Fan, 2014a); coextension paths (W. Han, 2012; Q. Li, 2014; Yang, 2013), and emanation paths in ancient Chinese (Deng, 2013). Similar to the study of fictive motion in other languages, coextension paths are the most frequently studied type, even though they are often termed with the superordinate, i.e., *fictive motion* (H. Huang & Han, 2012; Y. Wang, 2012; Zhong, 2012). In some cases, Chinese fictive motion expressions were studied in inappropriate ways, such as using Chinese translation of Japanese fictive motion expressions to conclude that Chinese does not have certain types of fictive motion expressions (Hilohumi, 2005), which is easily refuted with more data (Y. Li, 2011b, p. 265; 2011c, p. 87; Y. Wang, 2012, p. 1). Another example is to define fictive motion in the wrong way as including metaphorical motion events (Deng, 2012; Yao, 2007).

Apart from the six types of fictive motion in Talmy's categorization scheme, new categories have been proposed. Yao (2007) classified Chinese fictive motion expressions into two types, namely, fictive motion expressions with displacement and fictive motion expressions without displacement. Fictive motion expressions with displacement overlap with the types in (Talmy, 2000a) under different terms; fictive motion expressions without displacement include three subtypes, and they are emergence, leaning, and surrounding paths, among which emergence paths can be considered as similar to fictive change while leaning paths and surrounding

paths are new types different from the existing ones, as illustrated in the examples (adapted from Yao, 2007, p. 19 & 12) below respectively.

(2-39) 陵园**依山傍水**，地理环境优雅。[6]

líng-yuán	**yī-shān-bàng-shuǐ**,	dì-lǐ	huán-jìng
cemetery	**lean-against-mountain-river**	geographical	environment

yōu-yǎ.
elegant

Leaning against mountains and rivers, the geographical environment of the cemetery is elegant.

(2-40) 远远的一座塔耸立在山坡上，许多大树**拥抱**着它。

yuǎn-yuǎn-de	yī-zuò	tǎ	sǒng-lì	zài-shān-pō-shàng,
faraway	one-CL	tower	stand	ZAI-mountain-on

xǔ-duō	dà-shù	**yōng-bào**	zhe	tā.
many	big-tree	**hug**	DUR	it

A tower stands on a mountain in a faraway place, and many big trees surround it.

In the above sentences, the fictive motion *lean* and *hug* do not cause physical displacement but imply preceding movement. Similarly, Wang (2008) collected data from the Centre for Chinese Linguistics Corpus (CCL) and classified Chinese fictive motion expressions into the categories of coverage paths, combination paths, emergence paths, relative-frame paths, projection paths, perception paths, directing paths, and leaning paths, among which leaning paths are similar to the one proposed in (Yao, 2007) and all the other ones have been discussed in (Talmy, 2000a) under different terms.

Fictive motion expressions are studied from the perspective of motion event theory in terms of the semantic elements composing the fictive motion events, such as the Figure, the Ground, path information, manner information, and duration and distance (Fan, 2014a, 2014c; W. Han, 2012; H. Huang & Han, 2012; Y. Li, 2011c; Yang, 2013). For the entities described with coextension paths, they can either be travelable or non-travelable (Fan, 2014c, p. 85; W. Han, 2012, p. 60), and they tend to be inanimate, extendable, static, and long (Y. Li, 2011c, p. 88). For path and manner information, it is found that Mastumoto's two conditions (Matsumoto, 1996c, p. 194) can generally be satisfied in Chinese for coextension paths and access paths

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[6] The illustration of a Chinese example is composed of four parts. The first line is the original Chinese fictive motion sentence; the second line is the corresponding transcription in pinyin; the third line is the literal translation of each Chinese word in English that may sometimes sacrifice the idiomaticality of English in order to show the original structure of Chinese; and the last line is the English translation of the Chinese sentence. The abbreviations in the second line are based on (C. N. Li & Thompson, 1981).

(Fan, 2014c, pp. 92-99; W. Han, 2012, p. 72 & 84; H. Huang & Han, 2012, pp. 52-54), and that compared to translational motion event expressions, fictive motion expressions tend to use fewer manner verbs but more path verbs (W. Han, 2012, p. 84). When fictive motion expressions encode the duration of the fictive movement, it is a reflection of the extension of the entity under discussion (Fan, 2014a, p. 18; Yang, 2013, p. 47).

Following Matsumoto's two conditions, Chinese coextension path expressions are argued to frequently use directional verbs and meander verbs (as defined in Levin, 1993, p. 256), but tend to suppress manner verbs (H. Huang & Han, 2012, p. 54; Y. Wang, 2012, p. 2). Similar conclusions are reached for access paths (Fan, 2014a, p. 18). This conclusion is argued to be applicable in most cases rather than function as absolute rules (Fan, 2011; Ma, 2014). Fan (2011) illustrated two coextension path sentences in Chinese that adopt manner verbs unrelated to path information, as shown below (Fan, 2011, p. 109).

(2-41) 湖岸上公路和铁路一起**奔向**一个目标。

huʹ-àn-shàng gōng-lù hé tiě-lù yìqí **bēn-xiàng**
lakeshore-on highway and railway together **rush-towards**

yígè mù-biāo.
a-CL target

On the lakeshore the highway and the railway rush together towards one target.

(2-42) 这条路顺着河**走**。

zhè-tiáo lù shùn-zhe hé **zǒu**.
This-CL road along-DUR river **walk**

This road walks along the river.

The manner verbs in the above two sentences do reflect some manner aspects of the imagined moving entity. The moving entities are presumably vehicles like cars and trains in (2-41), whose movement is fast and thus can be characterized properly with the verb 奔 (*bēn*; rush)[7] (ibid). On the other hand, the imagined moving entities in (2-42) are, in most cases, people who take a small walk along the river, so the verb 走 (*zǒu*; walk) can be adopted in depicting the road along the river (ibid). Therefore, the manner condition is not suitable for Chinese (ibid). It is found that fictive motion expressions in literary works tend to involve some manner information rather than solely encoding path information (Gao & Song, 2010, p. 2).

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[7] The display of Chinese words and characters in context is usually composed of three parts. The original Chinese is followed by a pair of parentheses, in which the pinyin and deirect translation are included. If the direct translation is not clear enough to be understood, a more idiomatic English translation is added following the direct translation.

Compared with pure path information, the involvement of manner information in fictive motion expressions can depict an object in a more fictive and vivid way, which is also the effect that literary works hope to achieve (ibid). Therefore, fictive motion expressions in literary works have a preference for encoding some manner information (ibid).

2.3 Relevant Chinese Grammar

Although fictive motion has been investigated since the 1980s, most findings have been based on English. The study of fictive motion in Chinese inevitably requires taking linguistic features of Chinese into consideration. In this section, relevant studies on Chinese linguistic constructions and features are reviewed, including disyllabification of Chinese words, disposal constructions, and how the verb is defined in this thesis.

2.3.1 Disyllabification

One feature in Modern Standard Chinese is the tendency to use disyllabic words. Monosyllabic words played a dominant role in ancient Chinese. The closer the language is to modern society, the fewer monosyllabic words were in use, and the more disyllabic words appeared (Z. Huang & Yang, 1990, p. 98; C. N. Li & Thompson, 1981, p. 14; Lv, 2002a, p. 406). The reasons for the disyllabification of Chinese are various and open to debate. One popular view in explaining disyllabification in Chinese is homophony avoidance (HA) theory (Z. Huang & Yang, 1990, pp. 99-100; C. N. Li & Thompson, 1981, p. 14; Lv, 2002a, p. 423). According to HA, a language with fewer syllables tends to use more disyllabic words to avoid homophonous ambiguities. There are evidences supporting that syllables went through a simplification process from ancient Chinese to modern Chinese, which results in a decrease in the number of syllables (Z. Huang & Yang, 1990, p. 99; S. Xu, 2005, p. 73). Thus disyllabification became the strategy to compensate for homophonous ambiguities caused by phonological changes. Other possible reasons include borrowing words in modern Chinese (Duanmu, 1999, pp. 19-20), metrical constraints (Duanmu, 1999, pp. 15-18), and disyllabic feet (Feng, 2001, p. 23).

2.3.2 Disposal constructions

One sentence pattern in Modern Standard Chinese is frequently observed in Chinese fictive motion expressions, i.e., the *bǎ* or *jiāng* construction. *Bǎ* constructions and *jiāng*

constructions were both serial verb constructions, and they acquired their current grammatical status after going through the grammaticalization process in which *bǎ* and *jiāng* evolved from a verb into a function word (M. Zhu, 1957). I will use the label "*bǎ* constructions" when this type of construction is discussed in a general way since the two constructions have similar meanings and functions.

The basic pattern of a *bǎ* construction is NP1+*bǎ*+NP2+VP. The prototypical event described with this construction is that the entity encoded in NP2 goes through physical displacement specified by VP under the influence of NP1 (W. Zhang, 2001, p. 2). The physical displacement can be extended to displacement in other domains, such as the temporal domain, the social domain, and the psychological domain (W. Zhang, 2001, pp. 3-8). In the case of fictive motion expressions, *bǎ* constructions are employed to describe the fictive displacement of NP2, which is a static physical entity, under the influence of NP1 in the manner of VP. NP1 is conceptualized linguistically as playing the role of an Agent that causes NP2 to perform the fictive physical movement.

Wang Li (1985, p. 82) classifies *bǎ* constructions as disposal constructions because they express an action of disposal or execution, that is, NP1 disposes NP2 in the manner specified by VP. Similarly, Li & Thompson (1981, p. 487) proposes a continuum on which it is more likely for a sentence to use a *bǎ* construction when it involves more information about the prominence and disposal of some object (NP2). Taking this disposal view, for fictive motion sentences employing a *bǎ* construction, the entity in the NP1 position is conceptualized as being capable of disposing the entity in the NP2 position, and thus NP1 is more active and determinative than NP2 and is taken to function as the source of the fictive motion.

2.3.3 The definition of the verb

The verbs in fictive motion expressions are analysed in terms of the kinds of semantic elements they encode. Since in many cases, the identification of the verb in a Chinese sentence is a debatable issue, it is important to come up with rules to define the scope of the verb and thus make the analysis consistent and reliable. The next several paragraphs will discuss how the verb is defined in Chinese fictive motion sentences for this study.

The difficulty in identifying the verb can first be illustrated by comparing English and Chinese. For written English, a word is the linguistic unit separated by spaces, and thus "word" is the most easily recognizable unit; but the discernible unit at a glance for written

Chinese is the character, and a word can be either one independent character or composed of more than one character. A second point is that for English, verbs are marked morphologically in terms of tense, aspect, number, etc., and thus can be identified straightforwardly with known position information; while Chinese is a non-morphological language, and thus the distinction between a verb and a verbal phrase is not clear. As a result, the identification of the verb in Chinese has to be conducted with a set of semantic and syntactic rules, the weighting of which different scholars have different opinions (Chao, 1968, pp. 182-187; C. N. Li & Thompson, 1981, p. 54; Lv, 2002b, pp. 280, 290; D. Zhu, 1999, pp. 41-42). Apart from the character-centred and non-morphological features, modern Chinese is also characterized by other complex constructions related to the verb, such as serial verb constructions and verb-complement constructions. What makes things even more complicated is that some verbal predicates in fictive motion expressions are found to be in the patterns inherited from ancient Chinese, such as the pattern *AA érB*[8] (L. Wang, 1958, pp. 337-338; 1981b, p. 446) and *noun of locality+monosyllabic verb*[9] (J. Zhang, 2011, pp. 125-140). Neither of the two patterns is a word unit in ancient Chinese, but when used in the context of Modern Standard Chinese with other modern linguistic forms, they seem to be a unique unit and thus appear cohesive. Another factor that makes them look like a word is that some Chinese idioms are also organized in the pattern *AA érB* (Hu & Zhang, 2002, p. 24). Those Chinese idioms have been learned and stored as conventionalized units functioning as words. The common pattern shared by conventionalized idioms and other verbal units improves the degree of cohesion of those verbal units. Given the inconsistent rules in identifying words and various complex verbal units, it is necessary to establish operational principles to define the verb.

There are two principles adopted to decide whether a verbal unit is a word or a phrase, i.e., the general principles for each pattern of verbal units and the lexicalization principle. For a certain verbal unit under discussion, the first step is to identify which pattern of verbal units it belongs to, and the next step is to apply the corresponding general principle and then the lexicalization principle. Below is a table illustrating all the patterns of verbal units occurring in fictive motion expressions collected and the respective general principles of how to deal with each of them.

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8 For the construction *AAérB*, *AA* is a disyllabic adverbial word, *B* is a monosyllabic verb, and *ér* is a function word indicting that the motion encoded by *B* is modified by the word *AA*.
9 For the construction *noun of locality+monosyllabic verb*, the noun of locality helps to specify the direction of the movement expressed by the following verb.

Table 2.2 Verbal predicate patterns and how to treat each of them generally

	patterns	examples	general principles of each pattern
1	compound verbs	伸展 (*shēn-zhǎn*; extend)	Compound verbs are treated as one verb.
2	verb-complement constructions	刺穿 (*cìchuān*; pierce-through)	The first verb is one verb unit, and the complement is another word.
3	disyllabic verbs (one morpheme)	绵延 (*miǎn-yán*; stretch)	The disyllabic verb is one verb as a whole.
4	monosyllabic verbs	入 (*rù*, enter)	There is no ambiguity.
5	*adverb+ monosyllabic verb*	斜射 (*xiéshè*, obliquely-radiate)	The monosyllabic verb is one verb unit, and the adverb is the adverbial modifier.
6	*noun of locality[10]+ monosyllabic verb*	南达 (*nán-dá*, south-arrive)	The monosyllabic verb is one verb unit, and the noun of locality is the adverbial modifier.
7	Chinese idioms	拔地而起 (*bá-dì-ér-qǐ*; rise-abruptly-from-the-ground)	Due to the low degree of decomposability in meaning, Chinese idioms are taken as one word unit.
8	*AA érB*	奔涌而出 (*bēn-yǒng-ér-chū*; surging-exit)	*B* is one verb unit, and *AA* is the adverbial modifier.

Compound verbs are verbs containing more than one syllable as well as morpheme. Most of them are listed as a single unit in *Modern Chinese Dictionary* (2012) as a verb, but some of them are not. However, they are judged to be compound verbs based on linguistic contexts. Compound verbs are a linguistic phenomenon in modern Chinese (C. N. Li & Thompson, 1981, p. 68; Lv, 2002a, pp. 399-421). They are treated as one verb unit.

In verb-complement constructions, it is possible for the verb to encode either the manner or path information apart from the movement, and the complement then specifies the path of the movement. The verb-complement construction is a feature of modern Chinese (Shi, 2002). For verb-complement constructions, the first verb is considered as one verb unit, and the verb

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[10] Nouns of locality in Modern Standard Chinese include cardinal directions, such as 东 (*dōng*; east), 西 (*xī*; west), 南 (*nán*; south), 北 (*běi*; north); and non-cardinal directions such as 上 (*shàng*; upper-side), 下 (*xià*; lower-side), 前 (*qián*; front-side), 后 (*hòu*; back-side), 左 (*zuǒ*; left), and 右 (*yòu*; right) (Qi, 1998).

complement is not included in the verb unit. As the name indicates, verb-complement constructions are linguistic units on the constructional level. Normally one main verb can be followed by many types of verb complements, and one verb complement is capable of matching many types of verbs (L. Wang, 2002, pp. 344-345). In addition, other linguistic units, such as 得 (*de*) indicating possibility and 不 (*bù*) indicating impossibility, can be inserted into the verb and the verb complement (ibid).

Disyllabic words are composed of two characters that bind together to form one morpheme (Lan, 2007, p. 14; Lv, 2002b, p. 8; L. Wang, 1981a, p. 88; Z. Xu, 1998, p. 15). The two characters in a disyllabic word are inseparable. They can usually be traced back to ancient Chinese (Shao, 2007, p. 117). The disyllabic words are treated as one verb unit since only one morpheme is involved.

Monosyllabic verbs are identified when there is no other grammatical element obviously attaching to the verb. In most cases, monosyllabic verbs encode path information while manner information is occasionally encoded. Monosyllabic verbs create a formal sense, since Modern Chinese is abundant with disyllabic words and monosyllabic words are relatively less employed in spoken language (L. Wang, 1958, p. 340). When a monosyllabic verb is used as the predicate, it is undoubtedly the main verb.

For the construction *adverb+monosyllabic verb*, the monosyllabic verb usually depicts the path rather than the manner of the movement, and the adverbial modifier is normally monosyllabic expressing further information about the path. The adverbial word preceding the verb usually has a root in ancient Chinese (T. Li, 2005, pp. 24-25). For this construction, the monosyllabic verb is taken as one verb. This is because that, first, different types of adverbs can combine with different monosyllabic verbs and vice versa; and second, functional words, such as 着 (*zhe*; indicating the modifying relationship between the adverb and the verb) can be inserted between the adverb and the verb.

For the construction *noun of locality+monosyllabic verb*, the noun of locality helps to specify the direction of the movement expressed by the verb following it. It is found that this construction is inherited from ancient Chinese (J. Zhang, 2011, pp. 125-140). Similar to the pattern *adverb+monosyllabic verb*, for the current pattern, only the monosyllabic verb at the end is considered as one verb unit due to the fact that this pattern is from ancient Chinese and in ancient Chinese the monosyllabic verb is the main verb of the clause (Z. Huang & Yang,

1990, p. 98; C. N. Li & Thompson, 1981, p. 14; Lv, 2002a, p. 423). This pattern can be expanded in modern Chinese as a verbal phrase containing an adverbial modifier plus a verb.

It is self-evident that Chinese idioms have a flavour of ancient Chinese, and they are treated as one word unit since they are highly fixed phrases (Hu & Zhang, 2002, p. 24).

For the construction *AA而B*, *AA* is a disyllabic adverbial word, *B* is a monosyllabic verb, and *而* is a function word indicting that the motion encoded by *B* is modified by the word *AA*. The semantic elements encoded in *AA* can either be manner or path information, whereas what is encoded in *B* is usually the path information. This construction can also be traced back to ancient Chinese (L. Wang, 1958, pp. 337-338; 1981b, p. 446). For this construction, only the monosyllabic verb in the *B* part is considered as the verb. Similar to *adverb+monosyllabic verb* constructions and *noun of locality+monosyllabic verb* constructions, the construction *AA而B* can be expanded into an adverbial modifier plus a verb.

The lexicalization principle overrides the general principles for each pattern in that, even though it should be decomposed into a verb and an extra grammatical element according to the corresponding general principle, one verbal unit is considered as one verb if it is listed in *Modern Chinese Dictionary* (2012) as a verb. Since the issue of whether one grammatical unit is a lexicalized word or not is subjective, I refer to *Modern Chinese Dictionary*[11] (2012) when lexicalization is involved. For example, for verb-complement constructions, *adverb+monosyllabic verb* constructions, *noun of locality+monosyllabic verb* constructions, and *AA而B* constructions, only part of the unit is considered to be the verb and the remainder is taken as either the complement or the adverbial modifier of the verb. These are the general principles instead of the absolute rules in that some units that are formed based on these patterns have gone through the process of reanalysis and become one word, such as the verb-complement construction 下来 (*xià-lái*; descend-come), the *adverb+monosyllabic verb* pattern 前进 (*qián-jìn*; forward-advance), the *noun of locality+monosyllabic verb* pattern 北上 (*běi-shàng*; north-ascend), and the highly entrenched *AA而B* pattern 擦肩而过 (*cā-jiān-ér-guò*; brush-against-a-person). The units that are listed in *Modern Chinese Dictionary* as a verb are considered as one verb unit. In these cases, the lexicalization principle is prioritized.

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11 This dictionary is widely accepted as one of the most authoritative collections of words in Modern Standard Chinese. The sixth edition, which is the newest edition, is used.

2.4 Theoretical Framework

Included in this section are three aspects that compose the theoretical framework. The three aspects are motion event theory, Conceptual Metaphor Theory, and Talmy's categorization of fictive motion based on English. The data are categorized based on Talmy's classification, and the established types of fictive motion are analysed from the perspectives of motion event theory and CMT.

2.4.1 Motion events

Following the discrepancy between the two conceptualizations discussed in Section 2.1, fictive motion expressions can also be regarded as involving two ways of cognitive representation when situated in the framework of motion event theory. Generally speaking, fictive motion expressions can be understood as a semantically locative type of motion event being described linguistically as a translational type of motion event. A motion event expression either designates a translational motion or a stationary location, as illustrated in (2-43) and (2-44) respectively.

(2-43)   The pencil rolled off the table. (Talmy, 2000b, p. 26)

(2-44)   The pencil lay on the table. (ibid).

There are four basic semantic elements constituting a Motion event. They include a Figure, which is the object whose path of motion (in the case of a translational motion) or location (in the case of a stationary location) is being characterized; and a Ground, which is the object with respect to which the Figural object is characterized (Talmy, 2000b, pp. 226-227). These two elements are shared by both translational motion events and locative motion events. Where they differ from each other lies in the other two semantic elements. One is the activating process, for which the value of a translational motion event is "motion" whereas the value of a locative motion event is "stationariness" (Talmy, 2000b, p. 227). The other related aspect is the association function, which is represented as the path of the motion on the part of the Figure with respect to the Ground in a translational motion event but as the site occupied by the Figure in terms of the Ground in a locative motion event (ibid). The four semantic elements for translational motion events and locative motion events are summarised in Table 2.3. Obviously, a fictive motion expression involves the semantic elements composing a locative motion event; but linguistically, it employs terms normally used to describe translational motion events.

Table 2.3 Semantic elements for two types of motion events

	Figure	Ground	activating process	association function
translational motion events	the Figural entity	the Ground entity	motion	path of the motion
locative motion events	the Figural entity	the Ground entity	stationariness	site occupied by the Figure

(2-45)   That mountain range goes from Canada to Mexico.

(2-46)   That mountain range lies (longitudinally) between Canada and Mexico.

In the case of a fictive motion path, such as the sentence in (2-45) from (Talmy, 2000a, p. 104), the Figural object under discussion (that mountain range) is located statically with respect to the Ground objects (Canada; Mexico), but instead of being represented as a locative motion event, as in (2-46) (ibid), the static situation is conceptualized linguistically in (2-45) as some Figural object moving along the path over its extent with respect to some Ground object(s). Thus, the locative motion event is conceptualized fictively as a translational motion event.

The Figure is defined as "a moving or conceptually movable entity whose path, site, or orientation is conceived as a variable, the particular value of which is the relevant issue"; and the Ground is defined as "a reference entity, one that has a stationary setting relative to a reference frame, with respect to which the Figure's path, site, or orientation is characterized" (Talmy, 2000a, p. 312). Apart from the definitional features, the Figure and the Ground have associated characteristics, as cited below in Table 2.4 (adapted from Talmy, 2000a, p. 183; 316). The last three pairs of characteristics listed in grey areas pertain to entities in the spatial domain.

Table 2.4 Associated characteristics of Figure and Ground

Figure	Ground
geometrically simpler (often pointlike) in its treatment	geometrically more complex in its treatment
more recently on the scene/in awareness	more familiar/expected
of greater concern/relevance	of lesser concern/relevance
less immediately perceivable	more immediately perceivable
more salient, once perceived	more backgrounded, once Figure is perceived
more dependent	more independent
has unknown spatial (or temporal) properties to be determined	acts as a reference entity, having known properties that can characterize the primary object's unknowns

more movable	more permanently located
smaller	larger

Although also associated with entities in the spatial domain, fictive motion is a special type of motion event, and it seems that not all static entities can be described in a dynamic way. It is interesting to look at what types of entities tend to be depicted with fictive motion expressions. Previous studies on the linguistic Figures in fictive motion expressions mainly focus on coextension paths. Entities described with coextension paths tend to be long or extended, such as roads or cables; or at least can be conceptualized as such, such as tables or a row of street lamps (Fan, 2014c, p. 85; Matlock, 2004a, pp. 227-228); and they have to be relatively large (Matlock, 2004a, p. 228). The entities described as moving in coextension paths can either be traversable or non-traversable (W. Han, 2012, p. 60; Matlock, 2004a, pp. 230-233). Little attention has been paid to the fictive Figure for the other five types of fictive motion, and the semantic domains where fictive motion expressions frequently occur are neglected.

Among the four semantic elements in a translational motion event, the path of motion is the core schema. I include four components into the semantic category Path, within which three come from Talmy and an extra one is added from studies on Chinese expressions of spatial relations (D. Han, 2007, p. 157; Qi, 1998, pp. 2-6). Talmy (2000b, p. 53) distinguishes three components of Path in spoken languages, namely, the Vector, the Conformation, and the Deictic. The Vector is the type of spatial relationship the Figure can execute with respect to the Ground, and it has four basic realizations, i.e. locative, arrival, traversal, and departure. The latter three types of Vector together form the source-path-goal schema. It is widely acknowledged that the source-path-goal schema is one of the basic schemas abstracted from our motion experience (Clausner & Croft, 1999, p. 15; Hampe, 2005, p. 2; Johnson, 1987, p. 126; Lakoff, 1987, p. 267). The component "Conformation" specifies the geometric relation the fundamental Ground schema bears to the schema for a full Ground object, such as the inside of an enclosure and the surface of a volume (Talmy, 2000b, pp. 53-54). The component "Deictic" has two values, i.e., 'toward the speaker' and 'in a direction other than toward the speaker' (Talmy, 2000b, p. 56). The fourth component is Direction, which refers to all the directional spatial relationships in addition to Deictic. It includes the spatial relationship between the Figure and the earth, i.e., cardinal directions; the one between the Figure and the speaker, such as upwards, downwards, forwards, backwards, leftwards, and rightwards; the one of the Figure with respect to itself, such as rotating; and the one among

multiple Figures, such as gathering and scattering. The components of Path and their realizations are summarized in Table 2.5.

Table 2.5 Components of Path and their realizations

Vector	locative; arrival; traversal; departure
Conformation	of the inside of an enclosure; of the surface of a volume; to one side of a point…
Deictic	toward the speaker; in a direction other than toward the speaker
Direction	cardinal directions; forwards; backwards; rotating; gathering; scattering…

It is typologically significant where the core-schema "Path" is situated in a sentence expressing a motion event. A language is a verb-framed language if it characteristically encodes path information in the verb, as shown in the Spanish example (Talmy, 2000b, p. 49) below.

(2-47) La   botella   entró   flotando a la   cueva.
         The   bottle   entered (Path encoded in the verb) floating to the cave

A language is satellite-framed if the path information in a motion event is expressed in the satellite[12]. A typical example where the path information is contained in the satellite is sentence (2-48) (Talmy, 2000b, p. 227) below.

(2-48)   The bottle floated into (Path encoded in the satellite) the cave.

Most languages are not perfectly verb-framed or satellite-framed, but rather tend to be verb-framed or satellite-framed. It is open to debate whether Modern Standard Chinese is more like a verb-framed language or a satellite-framed one (Chen, 2007; Chen & Guo, 2009; Shen, 2003; Slobin, 2004; Tai, 2003; Talmy, 2000a), but two things are generally agreed upon. First, it is accepted that diachronically speaking, Chinese has been moving from a verb-framed language towards a satellite-framed language, that is, Path tended to be encoded in the motion verb in ancient Chinese but less so in modern Chinese. Second, Modern Standard Chinese frequently uses the pattern *manner verb+path complement*[13] as the predicate to encode a translational motion event. The main contention among scholars lies in whether the path complement or the manner verb is the main verb, which will be disregarded here since it is not the concern of this study.

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12 The satellite "is a grammatical category of any constituent other than a nominal or prepositional-phrase complement that is in a sister relation to the verb root" (Talmy, 2000b, p. 222). English verb particles and Chinese verb complements are satellites.
13 This pattern is the directional-verb construction.

Apart from different surface forms encoding the Path, verb-framed languages and satellite-framed languages are found to exhibit other systematic differences. One difference is that satellite-framed languages tend to be more expressive with regard to manner information while verb-framed languages are less so (Slobin, 2004, pp. 250-253). This is because satellite-framed languages have the option to encode Manner in the main verb in addition to expressing Manner with other grammatical forms, such as adverbial phrases. On the other hand, the main verb in verb-framed languages does not contain manner information; hence, in general, manner information is expressed less frequently. When manner information is present, it causes extra encoding effort (ibid). Since Modern Standard Chinese has the option to express manner information in the verb, it is expected that manner information should be relatively salient in encoding motion events. It is found that the typologically different strategies for the encoding of manner information in the expressions encoding motion events are also observable in expressions describing metaphorical motion events (such as the dynamic depictions of entities in the domain of time, emotion, mind, etc.) (Özçalişkan, 2005).

As reviewed in Section 2.2.5, the encoding of path and manner information is also discussed for fictive motion events, or coextension paths. It is predicted based on English and Japanese that, for fictive motion expressions, some path information must be contained while no manner information can be encoded if it is unrelated to the path (Matsumoto, 1996c, p. 194).

Given the expectation that manner information should possess a relatively high salience in modern Chinese motion event expressions on the one hand, and the hypothesis that fictive motion event expressions cannot express manner information unrelated to the path on the other, it would be interesting to check whether verbs employed in fictive motion expressions encode manner information or not. If modern Chinese behaves similarly to English and Japanese in that it seldom encodes manner information, then it becomes a question of what kinds of verbs are used in fictive motion expressions, since the frequent predicate pattern in translational motion events in modern Chinese is *manner verb+path satellite*, and fictive motion events are conceptualized as translational motion events. Many motion verbs in modern Chinese contain manner elements, so it becomes an issue of how fictive motion paths are expressed in a dynamic way without employing motion verbs expressing the manner information.

In summary, there are two lines in the investigation of fictive motion expressions when they are situated in the framework of motion event theory. One is to keep the semantic elements

(the Figure and the Ground) constant and check what types of entities tend to be expressed by fictive motion expressions; the other is to keep the grammatical element (the verb) constant and see what types of semantic elements it expresses.

2.4.2 Conceptual Metaphor Theory

Fictive motion expressions involve two discrepant representations of the same entity. The entity or scene under discussion is known to be static on the one hand, while it is linguistically construed as dynamic on the other. One way of thinking about this incongruity between our static belief and the dynamic linguistic description can be ascribed to our cognitive ability to generate metaphoric mappings between different domains based on conceptual metaphors. CMT approaches certain linguistic expressions from the perspective that we have the cognitive capacity to process, understand, and express relatively more abstract concepts (target domain) in terms of more concrete ones (source domain) (Lakoff & Johnson, 1980). This process is realized through cross-domain mappings, where the image-schema structure of the abstract domain is compatible with that of the concrete domain. In the case of fictive motion expressions, conceptual metaphor operates under the mappings FORM IS MOTION and EVENTS ARE ACTIONS (Lakoff & Turner, 1989, pp. 144-146) , as illustrated in the following examples.

(2-49)   The roof slopes down. (Lakoff & Turner, 1989, p. 142)

(2-50)   Perceive how/its little ornament/tries to stop them---/See how it fails!/See how the converging lines/of the hexagonal spire/escape upward. (William Carlos Williams' poem; as cited in Lakoff & Turner, 1989, p. 140)

In the sentence in (2-49), the roof does not move anywhere, but the configuration of the roof is in the shape of a slope that has a higher end and a lower one. This is a fictive motion expression. It operates under the metaphoric mapping FORM IS MOTION (Lakoff & Turner, 1989, pp. 142-143). The source domain contains a downward sloping motion of some abstract entity, and the target domain is the roof with a slope. The form of the roof is understood and expressed in terms of the downward sloping motion tracing the form (ibid).

Sentence (2-50) takes this a step further in that the configuration of the building is understood and expressed as actions (Lakoff & Turner, 1989, p. 143). The source domain is a series of actions, and the target domain consists of metaphorical events. In the target domain, the ornament and the converging lines have some configuration and are metaphorically moving.

In the source domain, one Agent is trying to stop another Agent from escaping. This fictive motion sentence operates under the mapping EVENTS ARE ACTIONS (ibid).

Generally speaking, for fictive motion expressions, a static entity or scene is conceptualized in terms of dynamic linguistic forms. In other words, the entities in the static spatial domain are understood and expressed through entities in the dynamic spatial domain. The dynamic spatial domain is a very general domain that is associated with and intersects with many other domains. For example, the animal domain and the motion domain intersect in that one important component of the concept ANIMAL is being able to move. Obtaining a more specific picture of which domains related to the general motion domain are frequently employed to produce fictive motion expressions requires a more detailed investigation into authentic fictive motion data. This investigation is closely concerned with verbs since the verb is the grammatical position not only to convey a dynamic sense in fictive motion sentences, but also where manner information is frequently encoded in modern Chinese.

2.4.3 Talmy's categorization

This section explains the two sets of standards serving to distinguish different types of fictive motion, namely, the conceptual features and the semantic descriptions. The conceptual features are the distinguishing features proposed by Talmy (2000a, p. 105) as illustrated in Section 2.2.2. Talmy only listed the values of the distinguishing features for emanation paths, leaving all the other types of fictive motion undiscussed. In this section, the values of the distinguishing features for the six established types of fictive motion are listed and explained. In addition to the conceptual features, the categorization is also partly based on the semantic contexts under which the fictive motion sentence is used (Talmy, personal communication, April 23, 2013). These semantic contexts are described by Talmy for each type of fictive motion (Talmy, 2000a, pp. 105-116;128-139) and they are labelled as "semantic descriptions" in this thesis. The categorization is based on both the conceptual features and the semantic descriptions. Next, the conceptual features and the semantic descriptions for the six established types of fictive motion are discussed one by one.

An **Emanation path** involves an intangible entity moving fictively from a source to some distal object (Talmy, 2000a). The values of emanation path expressions are instantiated as follows.

    a. Factive motion of some elements need not be present for the fictive effect.

b. The fictively moving entity is itself fictive.

c. The fictive effect is observer-neutral.

d. What is conceived as fictively moving is an entity. (Talmy, 2000a, p. 106)

The occurrence of emanation paths does not involve the factive movement of an entity; the fictively moving entity does not exist in any physical or palpable form and thus it is fictive; the fictive effect does not depend on an observer's movement or scanning and so is observer-neutral; and therefore, what is conceived as fictively moving is an entity rather than the observation of an entity. These features are realised in all the subtypes of emanation paths illustrated below.

Emanation paths are further divided into orientation paths, radiation paths, shadow paths, and sensory paths (ibid).

Orientation paths are the conceptualization of "a continuous linear intangible entity emerging from the front of some object and moving steadily away from it (Talmy, 2000a, p. 106)." This entity could be conceived as either an intangible line (or shaft) in movement or an intangible abstraction moving along an intangible line (or shaft) (ibid). They are further grouped into prospect paths, alignment paths, demonstrative paths, targeting paths and line of sight. A typical example of each type is shown below (Talmy, 2000a, pp. 107-111):

(2-51) **Prospect path**: The cliff wall faces toward the valley.

(2-52) **Alignment path**: The snake is lying toward the light.

(2-53) **Demonstrative path**: The arrow on the signpost pointed toward the town.

(2-54) **Targeting path**: I pointed my gun into the living room.

(2-55) **Line of sight**: I slowly turned my camera toward the door.

In (2-51), the cliff is linguistically conceptualized as an object with a face-like front, from which emerges a fictive course of motion moving towards the valley. In spite of the dynamic conceptualization on the linguistic level, the actual relation between the cliff and the valley is static (Talmy, 2000a, p. 108). The snake in (2-52) is a stationary linear entity with a perceivable head whose orientation is conceived as being aligned with the light as if something is moving along the snake and towards the light from its head (Talmy, 2000a, pp. 108-109). Demonstrative paths often involve a linear object, such as the arrow in sentence (2-53), whose end point points in some direction as if an intangible line originating from the end

point moves in that direction (Talmy, 2000a, p. 109). Demonstrative path expressions are often used to guide people's attention (ibid). In (2-54), the speaker intentionally targets the gun in such a direction that the bullet would follow the fictive line emerging from the front part of the gun (Talmy, 2000a, pp. 109-110). In (2-55), although the preposition *toward* is normally applied to describe the relationship between *my camera* and *the door*, the actual distance between the two entities does not decrease, and the movement is only the turning of the camera and probably also the speaker's head (Talmy, 2000a, pp. 110-111). Besides the actual motion, there is a fictive line moving from the camera to the door, and *toward* could be understood as specifying the path of this fictive line (ibid).

Radiation paths involve "radiation emanating continuously from an energy source and moving steadily away from it" (Talmy, 2000a, p. 111). The following example is a radiation path expression (Talmy, 2000a, p. 112):

(2-56)   The sun is shining into the cave/onto the back wall of the cave.

The situations in sentence (2-56) are generally perceived to be static, but linguistically we conceptualize the situations as dynamic processes in which the light moves from one place to another. It might be argued that technically the light is not static, and that it moves in the form of wave or photons, so that the movement of light is factive rather than fictive. This is true in physics, but we cannot perceive this movement of light with our comes naked eyes (Talmy, 2000a). Therefore, the movement encoded linguistically still from our dynamic conceptualization of static situations.

Shadow paths are conceptualizations such that "the shadow of some object visible on some surface has fictively moved from that object to that surface" (Talmy, 2000a, p. 114), as shown in the following sentence (ibid).

(2-57)   The tree threw its shadow down into the valley.

What we perceive in the scene described in (2-57) is a static shadow of the tree on the valley, but we describe the shadow as having moved from the shadow-bearer, i.e., the tree, to the valley (ibid).

The last type of emanation paths is the ***sensory path***, which involves "the conceptualization of two entities, the Experiencer and the Experienced, and of something intangible moving in a straight path between the two entities in one direction or the other" (Talmy, 2000a, p. 115).

Thus the direction can either go from the Experienced (*we*) to the Experiencer (*the enemy*), as shown in (2-58), or from the Experiencer (*the enemy*) to the Experienced (*we*) as in (2-59).

(2-58)   We can be seen by the enemy from where we're standing.

(2-59)   We can be seen by the enemy from where they're positioned.

Having discussed the subtypes of emanation paths, we will look at the other five types of fictive motion paths, i.e., pattern paths, frame-relative motion, advent paths, access paths, and coextension paths.

Pattern paths involve "the fictive conceptualization of some configuration as moving through space" (Talmy, 2000a, p. 128). What the linguistic forms convey for pattern paths is the motion of some arrangement of physical substance, whereas the situation being conceptualized in our belief is either static or involves some movement in a manner different from the one being depicted (Talmy, 2000a, pp. 128-129). Pattern path expressions are used when there is factive change involved, which, although does not constitute a pattern path, causes or is relevant to the occurrence of a pattern path (ibid). The following sentence depicts a pattern path (Talmy, 2000a, p. 129).

(2-60)   As I painted the ceiling, (a line of) paint spots slowly progressed across the floor.

The fictive motion in pattern path expressions is the result of the factive movement or change of some imagined construct (ibid). In (2-60), what is fictively conceptualized as moving is a line of spots that were produced as a result of the continuous painting of a person. The discrete paint spots are conceptualized as a continuous line, and the direction of the fictive movement on the part of the line of spots corresponds with the direction of the painting area (ibid). The distinguishing features for pattern paths are summarized below[14]. In contrast to emanation paths, factive movement must be present for pattern paths.

a. Factive motion of some elements must be present for that fictive effect.

b. The fictively moving entity is itself fictive[15].

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[14] All the following distinguishing features for the remaining types of fictive motion are listed by the author but they have been discussed with Leonard Talmy through emails (personal communication, April 23, 2013 & September 16, 2015).

[15] What fictively moves in a pattern path is an imagined construct (Talmy, 2000a, p. 129) of factive entities. Based on the data, the fictive moving entity in pattern paths is different from that in emanation paths in that the fictive moving entity in pattern paths is usually a Gestalt concept construed by human beings that is composed of factive entities (such as a city, a market, or the snow line) and thus is less palpable; whereas the fictive entity in emanation paths is itself less palpable and tangible (such as light, sound, or an imagined line).

c. The fictive effect is observer-neutral.

d. What is conceived as fictively moving is an entity.

Frame-relative motion is a highly embodied phenomenon. Frame-relative sentences take a moving observer as the reference point. The observer is depicted as stationary while the surrounding is represented as moving relative to the observer (Talmy, 2000a, p. 130).

(2-61)   I rode along in the car and looked at the scenery we were passing through. (Talmy, 2000a, p. 131)

(2-62)   I sat in the car and watched the scenery rush past me. (Talmy, 2000a, p. 132)

The sentences in (2-61) and (2-62) have basically the same conceptual content. The difference lies in the fact that the sentence in (2-61), in accordance with our daily perception and cognitive routines, takes the earth as the reference point, so that the car and the speaker are moving and the scenery is stationary; while the sentence in (2-62) adopts a self-centred perspective such that the speaker is conceptualized as stationary and the scenery is depicted as moving (Talmy, 2000a, pp. 130-131). In this sense, the sentence in (2-62) involves both fictive stationariness on the speaker's part and fictive motion on the scenery's part. Frame-relative motion can be selected according to the following features. Similar to pattern paths, it also involves movement in a factive manner, but the fictively moving entity is a factive one and the fictive effect is based on a factively moving observer.

a. Factive motion of some elements must be present for the fictive effect.

b. The fictively moving entity is itself factive.

c. The fictive effect is observer-based---and:

    i. The observer is factive.

    ii. The observer moves.

d. What is conceived as fictively moving is an entity.

Advent paths are depictions of "a stationary object's location in terms of its arrival or manifestation at the site it occupies" (Talmy, 2000a, p. 134), as illustrated in the following sentence (Talmy, 2000a, p. 135).

(2-63)   The palm trees clustered together around the oasis.

We normally believe that the palm trees have always been statically surrounding the oasis, but in (2-63), they are fictively represented as moving from some other dispersed places to

the location around the oasis (ibid). This pattern of conceptualization generates advent path expressions. Situations described with advent paths do not involve factive motion; the fictively moving entity is a factive entity; and the fictive effect is not based on a particular observer.

a. Factive motion of some elements need not be present for that fictive effect.

b. The fictively moving entity is itself factive.

c. The fictive effect is observer-neutral.

d. What is conceived as fictively moving is an entity.

Access paths are descriptions of "a stationary object's location in terms of a path that some other entity might follow to the point of encounter with the object" (Talmy, 2000a, p. 136). One typical example is shown below (Talmy, 2000a, p. 137).

(2-64)   The bakery is across the street from the bank.

The fictive path is realized by directional prepositions *across* and *from* in (2-64). The spatial relation of the bakery and the bank is conceptualized in such a way that someone can follow the path to the bakery; or somebody can perceive the bakery along the path from the bank; or even the speaker mentally scans over the map in his/her mind (Talmy, 2000a, p. 137). Access paths are fictive motions characterized by the following features:

a. Factive motion of some elements need not be present for that fictive effect.

b. The fictively moving entity is fictive.

c. The fictive effect is observer-based---and:

   i. The observer is fictive.

   ii. The observer scans or moves.

d. What is conceived as fictively moving is the observation of an entity.

For access paths, no factive motion is needed. The fictively moving entity is fictive, and it can be either an abstract entity imagined by the speaker or the speaker's focus of attention. The fictive effect is based on an observer, which can either be fictive and moves, such as an imagined moving person; or fictive and scans, such as when the speaker's focus of attention is mentally scanning along the path. What is conceived as fictively moving is the observation

of an entity because the speaker either scans or imagines some entity as moving along the path.

The last and most often discussed type of fictive motion is **coextension path expressions**, which depict "the form, orientation, or location of a spatially extended object in terms of a path over the object's extent" (Talmy, 2000a, p. 138). These were termed *coverage paths* in Talmy (1996). The sentence in (2-65) is an example of coextension paths (Talmy, 2000a, p. 138).

(2-65)   The fence goes from the plateau to the valley.

The fence between the plateau and the valley in (2-65) is normally taken to be a static object. However, the fence with its linear, path-like configuration is described as a dynamic entity moving from the plateau to the valley. What conceptually moves could be either an imagined entity, or the focus of attention, or the mental image of the fence (ibid.).

The distinctive features for coextension paths are:

a. Factive motion of some elements need not be present for that fictive effect.

b. The fictively moving entity is itself factive.

c. The fictive effect is either observer-neutral or observer-based---and if it is observer-based

   i. The observer is fictive.

   ii. The observer either moves or scans.

d. What is conceived as fictively moving is either an entity or the observation of an entity.

Factive motion is not needed for coextension paths. The fictively moving entity depicted in the sentence is a factive extended entity. The fictive effect can either be observer-neutral when the extended object is conceptualized as moving in an observer-neutral manner; or observer-based when an imagined entity is moving along the path (the observer is fictive and moves) or when the speaker's focus of attention scans along the path (the observer is fictive and scans). What is conceived as fictively moving is an entity when the fictive effect is observer-neutral, and it is the observation of an entity when the fictive effect is observer-based.

The categorization of examples in this thesis is based on the conceptual features and semantic descriptions as discussed above.

2.5 Research Questions

1. How can fictive motion expressions in Modern Standard Chinese be categorized based on Talmy's criteria?
    i. Do all the six established types of fictive motion in English have their instantiations in Chinese?
    ii. Can all the Chinese fictive motion data be accommodated by the current established types?
2. What types of participants are typically associated with fictive motion expressions?
3. What kinds of semantic information are encoded in the verbs in fictive motion expressions?
4. What specific metaphoric mappings are involved in fictive motion expressions?

The categorization of fictive motion is based on the observation that fictive motion expressions are not homogeneous (Yang, 2013, p. 44).The first research question is based on all the collected fictive motion data in Chinese, whereas the following three research questions are based on the six established fictive motion types instantiated in Chinese. A detailed description of the methodology can be found in the next chapter.

CHAPTER 3 COEXTENSION PATHS

This chapter and the three following present the analysis of fictive motion expressions. The focus of this chapter is coextension paths. Before analysing specific types of fictive motion, I will first explain how the data for all the following analysis in this thesis are collected.

3.1 Data Collection

3.1.1 Data source

The data for this study are collected from published magazines and essays. Neither introspective data nor existing corpora are employed due to the nature of the research questions developed in Chapter 2.

Both introspective data and empirical data have their advantages. Introspective data can provide clearer examples and are easy to manipulate, and they play an important role in the early studies on fictive motion (Langacker, 1986; Matsumoto, 1996c; Talmy, 2000a). However, the merits of empirical data make them more appropriate to answer the research questions. It is reasonable to use usage-based data as the study object since they are tied tightly to the linguistic system (Kemmer & Barlow, 2000). Data based on usage can present a fuller, albeit more complicated, picture of fictive motion expressions. They can show different categories of fictive motion in a more comprehensive way; and they objectively illustrate what types of participants are involved in fictive motion sentences, what semantic elements are encoded in the verbs, and also the types of metaphors involved. In addition, it is possible for empirical data to provide frequency information for the elements under discussion.

Existing corpora are not used because data collected from existing corpora will be circumscribed by the search terms employed. Fictive motion expressions are not limited by a set of particular words or constructions and so an exhaustive search is not possible. To get fictive motion sentences from an existing corpus requires searching relevant terms, either nouns or verbs or the combination of both. No matter how many search terms are specified, the searching results are still confined by the search terms. In this sense, it is less likely to find, first, other types of fictive motion expressions beyond the ones containing the search terms; second, a comprehensive range of participants and verbs contained in fictive motion

sentences; and third, diversified sentences to determine the conceptual metaphors involved. Using a set of fixed texts and collecting fictive motion sentences exhaustively from them can avoid these problems. To be sure, a fixed set of data source cannot cover all the usages of fictive motion expressions, but the most typical and frequent types will almost certainly have been included, and more importantly, data collected in this way present a relatively objective picture of language use.

The set of authentic texts is composed of a series of published magazines and essays, which are likely to be rich in fictive motion expressions. Based on previous studies on fictive motion and mother tongue intuition, it is assumed that descriptive writings about geography and travelling should contain more fictive motion expressions compared with writings on other topics. The data source includes geographical books and magazines, travel essays, and texts about scenic spots, as shown in Table 3.1.

Table 3.1 Data source

1 popular science book	
19 travel essay books	essay books by Qiuyu Yu (6 books)
	Modern and Contemporary Travel Essays by Famous Scholars with Photos (11 books)
	Excellent Chinese Travel Essays in the 20th Century
	People from East, West, South and North: Chinese Personality and Culture
3 magazines of twelve issues each	*Chinese National Geography* (12 issues)
	China National Travel (12 issues)
	Top Travel (12 issues)
13 textbooks	

Specifically speaking, one popular science reading book, 19 travel essay books, three magazines of 12 issues each, and 13 textbooks were chosen to be the set of data source. The popular science book introduces various topics concerning the earth, including the composition of the earth, geographical phenomena, natural resources, the environment, and some modern technologies associated with the exploration of the earth. Among the 19 essay books, six were by Qiuyu Yu, a famous essayist. His travel essays include descriptions of places not only in China, but also in the rest of the world. Eleven travel essay books constitute a series named *Modern and Contemporary Travel Essays by Famous Scholars with Photos*, including travel essays either written or edited by different writers. Two of them are descriptions of places outside of China, and the other nine depict locations within China. The

remaining two books are collections of travel essays by more than one hundred different writers, and most of the articles are about places in China. The three magazines are *Chinese National Geography*, *China National Travel* and *Top Travel*. *Chinese National Geography* covers physical geography, human geography, and cultural geography primarily in China. *China National Travel* focuses on travelling nationwide and worldwide. The target readers of *Top Travel* are Chinese international travellers, so the emphasis is on scenic spots worldwide. Junior high school textbooks are also incorporated into the written texts, including geography, physics, chemistry, and biology textbooks. There are roughly 9,500,000 characters in the data source. See the Appendix for detailed information on the publications making up the data source.

3.1.2 Data collection

All the texts in the data source were read sentence by sentence and all the fictive motion expressions noted. A sentence is considered as involving fictive motion if it satisfies the definition of fictive motion expressions. Fictive motion expressions are defined as sentences describing a physical entity or scene involving no motion with dynamic linguistic forms that are normally used to depict moving entities. There are two points worth further clarification for this working definition. First, the entity or scene under description must be a physical one existing in the external world, which means that any metaphorical motion event is not counted as a fictive motion event, such as events happening in the emotion domain, time domain, and financial domain. Second, dynamic linguistic forms include not only typical ones such as verbs and directional adpositions, but also adjectives, idioms, and nouns that involve a dynamic conceptualization of the entity or scene. By applying this working definition to the data source, altogether 3054 fictive motion sentences were collected. The proportion of fictive motion sentences is approximately 1.7%[16]. Table 3.2 below lists the numbers of instances in each type of texts.

Table 3.2   Numbers of examples in written texts

written texts	number of fictive motion examples	characters of fictive motion examples
popular science book	95	6555
essay books by Qiuyu Yu	202	11641
Modern and Contemporary Travel	360	14528

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[16] This percentage is calculated through dividing the number of characters of fictive motion sentences by the number of overall characters in the data source.

Essays by Famous Scholars with Photos		
Excellent Chinese Travel Essays in the 20th Century	347	25379
People from East, West, South and North: Chinese Personality and Culture	43	2991
Chinese National Geography	660	30718
China National Travel	544	25944
Top Travel	705	39505
textbooks	98	9090
Total	3054	166351

The number of fictive motion paths in those fictive motion sentences is more than 3054, because in some cases one sentence contains more than one fictive motion path.

3.1.3 Data processing

The set of fictive motion expressions obtained are classified. Although subjectivity is inevitably involved in the classification process, there are still two sets of standards to refer to. One is the set of distinguishing conceptual features proposed by Talmy (2000a, p. 105), and the other set is the semantic descriptions of each type of fictive motion in Talmy (2000a). As mentioned in Chapter 2, I will refer to the two sets of distinguishing standards as "conceptual features" and "semantic descriptions" respectively. The conceptual features and the semantic descriptions for the six established types of fictive motion have been explained in Sections 2.2.2 and 2.4.3 of Chapter 2. The abstract conceptual features and the tangible semantic descriptions together can be regarded as the tool to identify each type of fictive motion. There are overlaps between the conceptual features and the semantic descriptions but neither of them alone is enough to define different types of fictive motion. It is not appropriate for the highly abstract conceptual features to solely serve as the defining features, since they are difficult to grasp and they miss many semantic commonalities shared by instances within a certain type. On the other hand, the semantic descriptions are too general and leave some critical details missing, though they provide information on the semantic context and the general fictive motion process. In my view, it is better to take both the conceptual features and the semantic descriptions into consideration when identifying different types of fictive motion expressions.

With the working definition and the two sets of distinguishing standards, the six established types of fictive motion are categorized from the data source, and the numbers of instances of each type are shown in Table 3.3.

Table 3.3   Numbers of the six types of fictive motion

types of fictive motion	number of examples collected	characters of examples collected
emanation paths	1218	54870
pattern paths	109	5537
frame-relative motion	93	5716
advent paths	136	8701
access paths	38	2233
coextension paths	1290	58281

Most collected fictive motion sentences can be classified into the six types, but there are also cases that cannot be accommodated very well by the established types. The six established types are analysed from the perspective of Cognitive Linguistics, after which the new types are discussed. The first established type of fictive motion to be discussed is coextension paths.

3.2 Coextension Paths

Coextension path expressions are the most frequently studied type of fictive motion. A coextension path sentence pertains to the "depiction of the form, orientation, or location of a spatially extended object in terms of a path over the object's extent" (Talmy, 2000a, p. 138). Coextension path sentences will be discussed from the perspectives of the participants involved, i.e., the Figure (Section 3.2.1) and the Ground (Section 3.2.2), the verbs (Section 3.2.3), and metaphoric mappings (Section 3.2.3). The following analysis is based on 1290 coextension path sentences collected from the written data.

3.2.1 Figures in coextension paths

Generally speaking, the participants in coextension path sentences include the Figure whose extension is described in terms of a coextension path and the Ground with respect to which the Figure is characterized. The entities functioning as the Figure in coextension paths fall into several domains. It is quite hard to precisely describe what those domains are one by one since they tend to be interwoven and interrelated. However, it is still possible to tentatively enumerate some domains that occur most, as shown in Table 3.4 below. One of the most frequent domains that adopt coextension path expressions is the domain of geographical phenomena. Entities related with geomorphology, such as the plain, the plateau, the basin, the mountain, the canyon, the iceberg, the desert, the sea, the island, and the volcano, are frequently described with coextension paths. Those entities are usually hard to move and large in scale. Coextension paths become an ideal choice in some cases to describe their

configurations. A related field is the domain of meteorology, including entities such as the band of rain, the cloud, the light, the fog, the rainbow, the sky, and the magnetosphere. They are also large in size. The distribution range of those entities is depicted by coextension path sentences. Another area that commonly employs coextension path expressions is the domain of plants. Entities in this domain tend to be the result of human impact on nature, such as terraced fields, rice fields, forests, trees, the grassland, flowers, and leaves. Apparently, some entities in this domain are associated with the geographic domain and again large in scale. The architectural structures[17] domain that involves more human participation encompasses entities like step stones, alleys, buildings, towns, streets, chimneys, corridors, towers, grottoes, highways, trails, bridges, the Great Wall, etc. Many entities in this domain are fixed at one place once having been built and are large in size. The last domain is body parts, which covers entities like long hair, the belly, the fin, the tail feather, and even the wrist-shaped entity of a jellyfish. Among the five domains, 645 entities in the domain of geographical phenomena are observed, followed by entities related with architecture, the number of which is 570. There are 120 entities related to plants described with coextension path expressions, and for the entities in the domains of meteorology and animal the numbers are 28 and 23 respectively[18]. The number of entities in each domain roughly reflects the relative frequency of occurrence of coextension path expressions in the corresponding domain because the data come from a fixed set of texts, and it is believed that, even with a broader and more diversified data set, entities described with coextension path expressions should be of similar types.

Table 3.4 Examples of Figures in coextension path expressions

geographical phenomena	冰川 (bīng-chuān; glacier)	山脉 (shān-mài; mountain-range)	岛屿 (dǎo-yǔ; island)	江 (jiāng; river)	沙漠 (shā-mò; desert)
meteorological phenomena	云 (yún; cloud)	彩虹 (cǎi-hóng; rainbow)	晚霞 (wǎn-xiá; sunset-glow)	雾 (wù, fog)	雨带 (yǔ-dài; rainband)
plants-related entities	树 (shù, tree)	枝叶 (zhī-yè;	桃花 (táo-huā;	青草 (qīng-cǎo;	葡萄园 (pú-táo-

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[17] The term "architectural structures" is used here to refer to not only three dimensional spaces with walls and roofs, but also man-made structures without walls or roofs, such as bridges and tunnels, as well as their constituent parts.

[18] Notice that the number of entities in the five domains together is larger than the number of coextension path sentences. This is due to the fact that in some cases, one coextension path sentence contains more than one coextension path and hence more than one Figure.

		branch-and-leave)	peach-blossom)	grass)	*yuán*; vineyard)
architectural structures	人行道 (*rén-xíng-dào*; sidewalk)	桥 (*qiáo*; bridge)	楼房 (*lóu-fáng*; building)	胡同 (*hú-tòng*; alley)	墙 (*qiáng*; wall)
animals	人 (*rén*; people)	足迹 (*zú-jì*; footprint)	肌腱 (*jī-jiàn*; tendon)	犄角 (*jī-jiǎo*; horn)	秀发 (*xiù-fà*; hair)

As stated in the definition of coextension paths at the beginning of Section 3.2, typical Figures in coextension paths are entities with a spatially extended configuration along some dimension. Based on the sentences collected from the written data, it is observed that entities functioning as the Figure are not necessarily themselves extended, but have the potential to be conceptualized as such. In some coextension paths, the extension under discussion is not a concrete object, but a group of similar entities conceptualized linguistically as one integrated entity that extends, as shown in the sentence in (3-1)[19] below.

(3-1)   镇上的**百来户人家**以驿站为中心，在四周井然有序地**铺展开来**。

> zhèn-shàng-de **bǎi-lái   hù   rén-jiā**   yǐ   yì-zhàn   wéi   zhōng-xīn,
> town-on-NOM **hundreds   CL   houses**   with post-house as   center

> zài   sì-zhōu   jǐng-rán-yǒu-xù-de   **pū-zhǎn-kāi-lái**.
> ZAI   around   in-order   **spread-out**

Hundreds of houses in the town spread out evenly with the post house as the center.

In the sentence in (3-1), what is described as gradually spreading are hundreds of houses. Normally an individual house cannot be described as spreading, but hundreds of houses can be schematized as one integral entity occupying an area large enough to be conceptualized as spreading.

There are two types of entities, i.e., river-type entities and plants, which I consider as requiring further discussion. River-like entities and plants are frequently described with coextension path expressions, but both of them have some ambiguous features that make it difficult to decide whether the sentences depicting them are fictive motion expressions or not.

River-type entities can be regarded as being composed of two parts, namely, the river channel and the water inside the channel. The sentence will be of no interest if what is depicted as moving is the water since the water is indeed moving. In some cases it is evident that what is

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[19] From Chapter 3 on, all the Chinese examples come from the data collected for this study unless otherwise specified. Detailed information can be found in Section 3.1 of this chapter and the Appendix.

conceptualized as fictively moving is the river channel, as shown in the sentence in (3-2), but in some cases it is difficult to tell whether it is the river channel or the water inside it that is described as moving, as in (3-3). Both the subjects in the two sentences are rivers. In (3-2), the focus is on the scope of the river so that what are encoded include the Source location, the Path locations, and the Goal location of the fictive movement of the river channel. The movement of the water is not the concern here, and no verbs specifically used for the description of fluid are employed in the sentence. Although the verb in the sentence in (3-3) is used non-metaphorically depicting the movement of fluid, the adverbial phrase preceding it is 蜿蜒 (*wān-yán*; in-the-manner-of-zigzagging), which obviously depicts the configuration of the river course. In this way, it seems that both the configuration of the river channel and the movement of the water are described. Another point is that in cases like (3-3), although the movement is on the part of the water, the direction of the movement is decided by the river course. For the present chapter, both sentences like the ones in (3-2) and (3-3) are included in the collection of coextension path expressions. Sentences like the one in (3-4) are not included due to its pure description of the movement of the water. It can be observed that the distal perspective (Talmy, 2000a, p. 70) adopted in (3-2) and (3-3) allows the scenes to be depicted with a larger scope of attention as integral entities, and details, such as the moving of water, are overlooked; while on the other hand, the proximal perspective (ibid) is employed in (3-4) so that the scene is depicted in detail with a small scope of attention, and the shape of the entire entity cannot be grasped.

(3-2)　它的（黑河）旅程从祁连山开始，到内蒙古居延海结束……它……**蜿蜒前行，伸向**荒漠。

tā-de (hēi-hé)	lǚ-chéng	cóng	qílián-shān	kāi-shǐ,	dào
its (Black-River)	journey	from	Qilian-Mountains	start	to

nèi-méng-gǔ	jū-yán-hǎi	jié-shù…tā…	**wān-yán**	**qián-xíng,**	
Inner-Mongolia	Juyan-Lake	end　　it	**windingly**	**forward-walk**	

shēn-xiàng	huāng-mò.
extend-towards	desert

The journey of Black River starts from Qilian Mountains and ends at Juyan Lake in Inner Mongolia. It winds forward into the desert.

(3-3)　河源只是一道小溪，**蜿蜒着流入**幽幽深草。

hé-yuán	zhǐ-shì	yí-dào	xiǎo-xī,	**wān-yán-zhe**	**liú-rù**
river-head	just-is	one-CL	brook	**wind-DUR**	**flow-into**

yōu-yōu	shēn-cǎo.
distant	tall-grass

The riverhead is just a brook, and it flows windingly into the tall grass in the distance.

(3-4) 我深情地望着对面……溪流正朝我**涌来**。

wǒ shēn-qíng-de	wàng-zhe	duì-miàn…	xī-liú	zhèng	cháo
I affectionately	gaze-DUR	opposite	stream	just	towards

wǒ	**yǒng-lái**.
me	**gush-come**

I gazed affectionately at the opposite stream that was gushing towards me.

Some long, linear parts of a plant are also frequently conceptualized linguistically as extending. What obscures the dividing line between factive motion sentences and fictive motion sentences lies in the fact that plants, or the parts of a plant, indeed grow, which means that the extension of a plant or one part of a plant is factive if a relatively long time frame is taken. For example, instead of depicting a specific fig tree as a scene perceived, the sentence in (3-5) introduces the root of the fig tree as a type. Notice that the adverbial phrases 不断 (*bú-duàn*; constantly) and 迅速 (*xùn-sù*, instantly) are used to indicate the temporal feature of the movement. In this case, the movement described is not fictive motion. It is general knowledge based on the observation and the study of many instances of fig trees. On the contrary, the sentence in (3-6) depicts a specific scene perceived within a very short time. Although the current length of the stem of the pumpkin is the result of its growing from a seed, the observation based on which the sentence is produced is an instant event. The stem of the pumpkin is a long, linear object, and its configuration is conceptualized linguistically in terms of the fictive motion along the stem. Sentences like the one in (3-6) are included in the collection of coextension path sentences whereas sentences like the one in (3-5) are excluded.

(3-5) 网状根**不断**向下扩展，深入土壤吸收水分和养分**迅速**变粗。

wǎng-zhuàng-gēn	**bú-duàn**	**xiàng-xià**	**kuò-zhǎn**,	shēn-rù
reticular-root	**continuously**	**downwards**	**expand**	stretch-into

tǔ-rǎng	xī-shōu	shuǐ-fèn	hé	yǎng-fèn	**xùn-sù**	biàn cū.
earth	absorb	water	and	nutrition	**quickly**	grow thick

The reticular root extends continuously downwards, stretches into the earth to absorb water and nutrition, and quickly grows thick.

(3-6) 窝瓜**爬上**墙头了，在墙头上开起花来了，有的竟**越过**了高墙**爬到**街上**去**。

wō-guā	**pá-shàng**	qiáng-tóu	le,	zài-qiáng-tóu-shàng
pumpkin-tree	**climb-onto**	wall	CRS	ZAI-wall-on

kāi-qǐ-huā-lái	le,	yǒu-de	jìng	**yuè-guò-le**	gāo-qiáng

begin-to-blossom   CRS some   unexpectedly   **pass**-PFV   tall-wall

pá-dào jiē-shàng **qù.**
climb-to street-on **go**

The pumpkin trees climb onto the wall and blossom there. Some of them unexpectedly pass the high wall and climb onto the street.

3.2.2 Grounds in coextension paths

The Grounds with respect to which the Figures are characterized include the Source location, the Path location, the Goal location, and the General location, as illustrated in Table 3.5.

Table 3.5   Examples of Grounds in coextension path expressions

Source locations	东 (*dōng*; east)	山顶 (*shān-dǐng*; mountain-top)	西湖 (*xī-hú*; West-Lake)	北京 (*běi-jīng*; Beijing)	海洋 (*hǎi-yáng*; sea)
Path locations	纬度方向 (*wěi-dù-fāng-xiàng*; latitude-direction)	江岸 (*jiāng-àn*; river-bank)	城市 (*chéng-shì*; city)	恒和平原 (*héng-hé-píng-yuán*; Gangetic-Plains)	河谷 (*hé-gǔ*; river-valley)
Goal locations	我 (*wǒ*; I)	前 (*qián*; front)	远处 (*yuǎn-chù*; distance)	晴空 (*qíng-kōng*; clear-sky)	边境 (*biān-jìng*; frontier)
General locations	南北 (*nán-běi*; south-north)	亚欧大陆 (*yà-ōu-dà-lù*, Eurasia)	洋底 (*yáng-dǐ*; ocean-floor)	大街小巷 (*dà-jiē-xiǎo-xiàng*; streets-and-alleys)	天际 (*tiān-jì*; horizon)

The Source location is the entity where the coextension path begins; the entity the coextension path passes through or extends along is the Path location; and the entity where the coextension path ends is the Goal location. In the sentence in (3-7), the Source location is the entity encoded by the noun phrase after 起自 (*qǐ-zì*; start-from), the Path locations are the entities encoded with the noun phrases after 经 (*jīng*; pass), and the Goal location is 上海 (*shàng-hǎi*; Shanghai), which follows the verb 到达 (*dào-dá*; arrive-at). The General location is the entity that is not the Source, Path, or Goal locations of the coextension path but is helpful in generally characterizing the coextension path. In the sentence in (3-8), the noun phrase 中亚 (*zhōng-yà*; Central-Asia) after the verb 横亘 (*héng-gèn*; horizontal-span) is identified as the General location. The General location serves as the background against which the coextension path is situated.

(3-7) （西气东输）管道主干线首站**起自**新疆塔里木轮南，**经**新疆、甘肃、宁夏、陕西、山西、河南、安徽、江苏**到达**上海。

(xī-qì-dōng-shū)	guǎn-dào	zhǔ-gàn-xiàn	shǒu-zhàn
(West-East-Gas-Transmission)	pipe	line-trunk	original-stop

qǐ-zì	xīn-jiāng lún-nán,	**jīng**	xīn-jiāng,	gān-sù,	níng-xià,
start-from	Sinkiang Lunnan	**pass**	Sinkiang	Gansu	Ningxia

shǎn-xī,	shān-xī,	hé-nán,	ān-huī,	jiāng-sū	**dào-dá**	shàng-hǎi.
Shaanxi	Shanxi	Henan	Anhui	Jiangsu	**arrive-at**	Shanghai

The trunk line of West-East gas pipe starts from Lunnan in Sinkiang, through Sinkiang, Gansu, Ningxia, Shaanxi, Shanxi, Henan, Anhui, and Jiangsu to Shanghai.

(3-8) 天山，是**横亘**中亚 2500 公里的世界最大的独立纬向山系。

tiān-shān,	shì	**héng-gèn**	zhōng-yà	2500-gōng-lǐ-de
Tianshan-Mountains	are	**lie-across**	Central-Asia	2500-km-NOM

shì-jiè	zuì-dà-de	dú-lì	wěi-xiàng	shān-xì
world	longest	independent	latitudinal	mountain-ranges

Tianshan Mountains, which lie across Central Asia for 2500 kilometers, are the longest independent latitudinal mountain ranges in the world.

In terms of frequency, the Goal location with 593 occurrences is by far the most frequently employed in characterizing coextension paths. The frequencies of the other three types of Ground are similar with the Source location being observed 215 times, the Path location appearing 223 times, and the General location occurring 281 times. The employment of different types of Ground is highly related to the dynamic linguistic forms, i.e., verbs and adpositions, etc. The discussion of verbs is in the next section.

3.2.3 Verbs and metaphors in coextension paths

In the 1290 coextension path sentences collected, 1502 tokens and 232 types of verbs are employed. The number of verbs is more than the number of sentences, indicating that in some cases one sentence contains two or even more verbs. This is not surprising given that serial verb constructions are abundant in modern Chinese.

The verbs employed in coextension path expressions are discussed in terms of the semantic elements encoded. After an examination of all the verbs employed, three basic semantic elements are identified. They are general motion information, path information, and manner information. In some cases, one verb encodes one basic semantic element; and in others, two basic semantic elements are encoded in one verb. Table 3.6 illustrates the classification of verbs based on the semantic elements encoded. All the three basic semantic elements can be

encoded independently in one verb; but not all the combinations of the three basic semantic elements are observed to be encoded in one verb. Manner plus path information and general motion plus path information are two combinations identified as being encoded in one verb. In this way, five types of semantic elements are encoded in the verbs, and they are general motion information, path information, manner information, manner plus path information, and general motion plus path information.

Table 3.6　Examples of verbs in coextension path expressions

general motion verbs (33.6%)		延伸 (yán-shēn; extend)	铺 (pū; spread)	绵延 (mián-yán; stretch)	出发 (chū-fā; depart)	止 (zhǐ; stop)
path verbs (49.7%)		到 (dào; arrive)	跨越 (kuà-yuè; span)	升 (shēng; rise)	经过 (jīng-guò; pass)	贯 (guàn; pass-through)
manner verbs (7.3%)	animal verbs (3.4%)	走 (zǒu; walk)	奔 (bēn; run-quickly)	追逐 (zhuī-zhú; chase)	飞 (fēi; fly)	赛跑 (sài-pǎo; race)
	liquid verbs (1.6%)	涌 (yǒng; gush)	流淌 (liú-tǎng; flow)	潜 (qián; dive)	流 (liú; flow)	洒 (sǎ; spray)
	force verbs (1.3%)	刺 (cì; stab)	切 (qiē; cut)	扎 (zhā; plunge-into)	拔 (bá; pull-up)	拖 (tuō; drag)
	default verbs (0.5%)	修 (xiū; repair)	烧 (shāo; burn)	建 (jiàn; construct)	盖 (gài; build)	搭 (dā; set-up)
	miscellany (0.5%)	滑 (huá; slide)	滑行 (huá-xíng; slide-walk)	划 (huá; scratch)	奏 (zòu; play-music)	飞驰 (fēi-chí; speed)
manner & path verbs (9.3%)		爬升 (pá-shēng; climb-rise)	蜿蜒 (wān-yán; zigzag)	下滑 (xià-huá; downward-glide)	盘旋 (pán-xuán; spiral)	穿行 (chuān-xíng; cross-walk)
general motion & path verbs (0.1%)		伸突 (shēn-tū; extend-protrude)			铺散 (pū-sàn; spread-scatter)	

General motion verbs account for one-third of all the verbs used in coextension path expressions. General motion verbs are grouped together as a result of the observation that for some verbs little manner or path information is encoded. For example, the most frequently

(145 times) used verb 延伸 (*yán-shēn*; extend) depicts the general extension process of an entity without specifying detailed path or manner information. Another verb 铺 (*pū*; spread), which occurs 13 times, is used to describe the spread of a planar entity without encoding additional path or manner information. Also included in this group are verbs expressing "start" or "stop", such as 出发 (*chū-fā*; start) and 止 (*zhǐ*; stop). These two verbs only indicate the beginning and ending of the fictive movement without specifying either the manner or the path. Although almost no manner or path information is encoded in the verb itself, there are usually other linguistic forms expressing such information, such as directional verb complements, adpositional phrases, and adverbial phrases, as shown in the sentences in (3-9) and (3-10). The directional verb complements 出来 (*chū-lái*; out-come) in (3-9) and 开 (*kāi*; open) in (3-10), and the adpositional phrases 从 (*cóng…*; from…) in (3-9) and (3-10) provide the path information of the coextension paths. The adverbial phrase 缓缓 (*huǎn-huǎn*; slowly) in (3-10) depicts the manner of the spreading process.

(3-9)　那是一条公路，**从**机场**延伸出来**。

nà　　shì　yì-tiáo　　gōng-lù，　**cóng**　　jī-chǎng　　**yán-shēn-chū-lái**.
that　is　　one-CL　　highway　　**from**　airport　　**extend-out-come**
That is a highway that extends out from the airport.

(3-10)　草原如地毯般**从**山脚缓缓**铺开**……

cǎo-yuán　　rú-dì-tǎn-bān　　**cóng** shān-jiǎo　　huǎn-huǎn **pū-kāi**…
grassland　　like-carpet　　**from** mountain-foot　　slowly　　**spread-open**
The grassland spreads out slowly from the foot of the mountain like a carpet.

Verbs that encode path information but no manner information or general motion information are classified as path verbs. They take up the largest proportion (49.7%) of all the verb types used in coextension path expressions. There are 746 tokens and 94 types of path verbs identified. Path verbs can either be monosyllabic or disyllabic. Monosyllabic verbs include the group of path verbs that, although used independently here, can also serve as directional-verb complements following another verb, such as 上 (*shàng*; ascend), 下 (*xià*; descend), 过 (*guò*; pass), 到 (*dào*; arrive), 出 (*chū*; exit), 进 (*jìn*; enter), 入 (*rù*; enter[20]), 来 (*lái*; come), and 去 (*qù*; go). Other monosyllabic verbs are also observed, such as 耸 (*sǒng*; rise-straight-up), 落 (*luò*; drop), 降 (*jiàng*; fall), 穿 (*chuān*; pass), 历 (*lì*; pass), and 凹 (*āo*; cave-in).

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[20] The verbs 进 (*jìn*; enter) and 入 (*rù*; enter) have similar meanings. 入 is more formal than 进 when used in motion event expressions.

Disyllabic verbs can either be monomorphemic verbs or verbs containing two morphemes. Most monomorphemic verbs are disyllabic words, such as 辐辏 (*fú-còu*; converge), 辗转 (*zhǎn-zhuǎn*; pass-through-many-places), and 贯穿 (*guàn-chuān*; run-through). Other disyllabic path verbs are conventionalized compound verbs, including verb-complement constructions, such as 进入 (*jìn-rù*, enter-into), 上去 (*shàng-qù*, ascend-go), 经过 (*jīng-guò*, pass-through), and 到达 (*dào-dá*, arrive-to); verbs containing a noun of locality and a path verb, such as 南下 (*nán-xià*, southwards-descend), 上升 (*shàng-shēng*; upwards-rise), 北上 (*běi-shàng*; northwards-rise); verb compounds containing an adverb and a path verb in which the adverb is helpful in depicting the path, such as 直达 (*zhí-dá*, directly-arrive), 高耸 (*gāo-sǒng*; highly-rise), 横贯 (*héng-guàn*; horizontally-run-through); and other verbs that encode path information but no manner or general motion information, such as 途经 (*tú-jīng*; via/by-way-of), 抵达 (*dǐ-dá*, arrive-at), 改道 (*gǎi-dào*; change-route), and 翻越 (*fān-yuè*, cross-over). The sentence in (3-11) below illustrates the use of path verbs in coextension path expressions. The path verbs include 经 (*jīng*; pass), 直至 (*zhí-zhì* directly-arrive), 转 (*zhuǎn*; turn), and 到 (*dào*; arrive).

(3-11) 欧亚大草原……西自欧洲多瑙河下游，呈带状往东延伸，**经**匈牙利……蒙古，**直至**中国的东北平原，然后**转**向西南，**经**内蒙古高原、黄土高原**到**青藏高原的南缘……

ōu-yà-dà-cǎo-yuán	xī-zì	…ōu-zhōu	duō-nǎo-hé	xià-yóu,
Eurasian-Steppe	west-from	Europe	the-Danube	downstream

chéng-dài-zhuàng	wǎng-dōng	yán-shēn,	**jīng**	xiōng-yá-lì…
in-belt-shape	towards-east	extend	**through**	Hungary

měng-gǔ,	**zhí-zhì**	zhōng-guó-de	dōng-běi-píng-yuán,	rán-hòu
Mongolia	**all-the-way-to**	China-ASSOC	the-Northeast-Plain	then

zhuǎn-xiàng	xī-nán,	**jīng**	nèi-méng-gǔ-gāo-yuán,	huáng-tǔ-gāo-yuán
turn-to	southwest	**pass**	Inner-Mongolian-Plateau	Loess-Plateau

dào	qīng-zàng-gāo-yuán-de	nán-yuán…
arrive	Tibetan-Plateau-ASSOC	south-part

The west of the Eurasian Steppe starts from the Danube in Europe, extends eastwards like a belt, and goes all the way to the Northeast Plain in China through Hungary, Mongolia, and then it turns towards southwest, goes through Inner-Mongolian Plateau and Loess Plateau, and arrives at the southern part of Tibetan Plateau.

Manner verbs are verbs that only encode manner information but no path or general motion information. They occupy only 7.3% of all the verbs employed in coextension path

expressions. They are further grouped into animal verbs, liquid verbs, force verbs, default verbs, and miscellany verbs, which will be explained one by one next.

An animal verb is a verb that normally takes an animal as its subject. Coextension path sentences with animal verbs are motivated by the metaphoric mapping A SPATIALLY EXTENDED OBJECT IS AN ANIMAL. The sentences from (3-12) to (3-14) illustrate this mapping. In (3-12), the road is conceptualized as an animal that walks to the end. In the sentence in (3-13), the glacier tongue is described as rushing towards a person like an animal. In (3-14), the highway is conceptualized as chasing the Yellow River all the way towards the east.

(3-12)　从大陆伸展过来的道路在这里**走到**了尽头……

　　　　cóng　　dà-lù　　shēn-zhǎn-guò-lái-de　　dào-lù　　zài-zhè-lǐ
　　　　from　　mainland　extend-towards-here-NOM　road　　ZAI-here

　　　　zǒu-dào-le　　jìn-tóu…
　　　　walk-to-PFV　　end

　　　　The road extending from the mainland walks to its end here.

(3-13)　正对面，尕舍罗鲁姆冰川的冰舌从雪山逶迤而下，**向你奔来**。

　　　　zhèng-duì-miàn,　　gǎ-shě-luó-lǔ-mǔ-bīng-chuān-de　bīng-shé　cóng
　　　　opposite　　　　　　Gasheluolumu-Glacier-ASSOC　　　tongue　　from

　　　　xuě-shān　　　　wēi-yí-ér-xià,　　**xiàng**　　nǐ　　**bēn-lái**.
　　　　snow-mountain　winding-descend　**towards**　you　**rush-come**

　　　　Opposite, the tongue of Gasheluolumu Glacier winds down from the snow mountain and rushes towards you.

(3-14)　山间唯一的一道公路**追逐**着黄河的脚步一路向东……

　　　　shān-jiān　　wéi-yī-de　　yí-dào　　gōng-lù　　**zhuī-zhú**-zhe
　　　　mountain-in　only　　　　one-CL　　highway　　**chase**-DUR

　　　　huáng-hé-de　　　　jiǎo-bù　　yí-lù　　　　xiàng　　dōng…
　　　　Yellow-River-ASSOC　step　　　all-the-way　towards　east

　　　　The only highway in the mountain chases the steps of the Yellow River all the way to the east.

Liquid verbs are verbs that are normally employed to describe water-like entities. Most coextension path sentences with liquid verbs are structured by the metaphoric mapping A SPATIALLY EXTENDED OBJECT IS LIQUID. As discussed in Section 3.2.1, one type of Figure in coextension paths is river-like entities. It is natural and factive for river-like entities to be modified with liquid verbs, so that such sentences are not under consideration for this metaphoric mapping. The sentences below from (3-15) to (3-18) illustrate how words from

the liquid domain are borrowed to describe entities in the spatial domain. In the sentence in (3-15), the highway is conceptualized as flowing like a river. The sentence in (3-16) describes the sand dunes as waves that beat into the distance. The bamboo forest in (3-17) is depicted as surging forward like waves. In the sentence in (3-18), the houses built along the slope of the hill are conceptualized as an integral entity, which is spilt down the slope like milk.

(3-15) 美国 66 号公路堪称**流动**在北美大陆上的最壮伟的自然风景线。

měi-guó-66-hào-gōng-lù	kān-chēng	**liú-dòng**	zài-běi-měi-dà-lù-shàng-de
US-Route-66	called	**flow**	ZAI-North-America-on-NOM

zuì	zhuàng-wěi-de	zìrán	fēng-jǐng-xiàn.
most	magnificent	natural	scenery

US Route 66 can be called the most magnificent natural scenery flowing in North America.

(3-16) 烈日灼烤下，连绵的沙丘如巨浪**拍**向远方。

liè-rì	zhuó-kǎo	xià,	lián-mián-de	shā-qiū	rú	jù-làng
burning-sun	scorch	under	continuous	sand-dune	like	big-wave

pāi-xiàng	yuǎn-fāng.
beat-into	distance

Under the burning sun, the continuous sand dunes beat into the distance like big waves.

(3-17) 广袤的竹林如绿色的海浪，从远处浩浩荡荡地席卷而来，但在一个狭长的湖泊处暂作停留后，开始放慢脚步，以更舒缓的态势接着往前**涌**，直至莫干山山顶。

guǎng-mào-de zhú-lín	rú	lǜ-sè-de	hǎi-làng,	cóng yuǎn-chù
vast bamboo-forest	like	green	wave	from distance

hào-hào-dàng-dàng-de	xí-juǎn-ér-lái,	dàn	zài-yí-gè-
in-formidable-patterns	sweepingly-come	but	ZAI-one-CL-

xiá-cháng-de-hú-pō-chù-zàn-zuò-tíng-liú-hòu,	kāi-shǐ	fàng-màn
narrow-long-lake-place-temporarily-stay-after	begin	slow

jiǎo-bù,	yǐ	gèng-shū-huǎn-de	tài-shì	jiē-zhe	wǎng-qián
step	with	gentler	pace	continue	towards-front

yǒng,	zhí-zhì	mò-gān-shān	shān-dǐng.
surge	all-the-way-arrive	Mogan-Mountain	mountaintop

The vast area of bamboo forest sweeps over in formidable patterns from the distance like green waves. But after staying at a long narrow lake for a short time, it slows down and continues to surge forwards in a gentler pace all the way to the top of Mogan Mountain.

(3-18) 湖山之间，一块小小的平原 ……密密麻麻盖满了房子……浅色的民居便在青黑色的风景里，像泼翻了的牛奶一直向山脚下**洒**过去。

hú-shān-zhī-jiān, yí-kuài xiǎo-xiǎo-de píng-yuán mì-mì-má-má
lake-mountain-between one-CL small plain densely

gài-mǎn-le fáng-zi… qiǎn-sè-de mín-jū biàn
build-full-PFV house light-coloured house then

zài-qīng-hēi-sè-de-fēng-jǐng-lǐ, xiàng pō-fān-le-de niú-nǎi
ZAI-black-scenery-in   like spilt   milk

yì-zhí xiàng shān-jiǎo-xià **sǎ-**guò-qù.
all-the-way towards mountain-foot **spray**-over

There is a small plain full of houses between the mountain and the lake. With the black scenery as the background, the light-coloured houses spray over towards the foot of the mountain like spilt milk.

The last possible metaphoric mapping involved in coextension path expressions is A SPATIALLY EXTENDED ENTITY IS A FORCEFUL ENTITY. In some cases, spatially extended entities are conceptualized as having kinetic energy so that force is involved in the fictive motion. The sentences below from (3-19) to (3-22) all contain a verb that encodes the force sense. They are 拖 (*tuō*; drag) in (3-19), 冲 (*chōng*; rush) and 扎 (*zhā*; plunge) in (3-20), 切 (*qiē*; cut) in (3-21), and 刺 (*cì*; stab) in (3-22). Notice that the three metaphoric mappings are not mutually exclusive. An animal-like entity can also have kinetic energy, as shown in the sentence in (3-20).

(3-19) 从阴山高处**拖**下来的深绿色的山坡，安闲地躺在黄河岸上……

cóng yīn-shān gāo-chù **tuō-**xià-lái-de shēn-lǜ-sè-de
from Yin-Mountain high-place **drag**-down-come-NOM dark-green

shān-pō, ān-xián-de tǎng zài-huáng-hé-àn-shàng…
hillside peacefully lie ZAI-Yellow-River-bank-on

The dark green hillside that is dragged down from the higher place of Yin Mountain lies peacefully on the bank of the Yellow River.

(3-20) 这万里长城，从燕山支脉的角山上直**冲**下来，一头**扎**进了渤海岸边。

zhè wàn-lǐ-cháng-chéng, cóng yān-shān-zhī-mài-de
this Great-Wall   from Yan-Mountain-branch-ASSOC

jiǎo-shān-shàng zhí   **chōng-**xià-lái, yìtóu
Cape-Mount-on all-the-way **rush**-down-come head

zhā-jìn-le bó-hǎi àn-biān.
jump-into-PFV Bohai-Sea bank

The Great Wall rushes down all the way from the Cape Mount of Yan Mountain and jumps into the bank of the Bohai Sea.

(3-21) 东坡陡峭，简洁有力地**切入**松嫩平原。

dōng-pō   dǒu-qiào, jiǎn-jié   yǒu-lì-de **qiē-rù**
east-mountain-slope steep   directly   powerfully **cut-into**

sōng-nèn-píng-yuán.
Songnen-Plain

The mountain slope on the east side is steep. It cuts into Songnen Plain directly and powerfully.

(3-22) 雪峰……白皑皑，亮晶晶**刺入**蔚蓝无际的晴空。

xuě-fēng…   bái-ái-ái, liàng-jīng-jīng **cì-rù**   wèi-lán   wú-jì-de
snow-peak   white   glistening   **stab-into** blue   endless

qíng-kōng.
clear-sky

The snow peak, which is white and glistening, stabs into the vast blue clear sky.

If the verb and the subject match each other, or in other words, if the verb is normally used to modify the subject in non-metaphorical cases, then the verb is referred to as the default verb[21] for the subject. The verbs in the default verb group are the orthodox verbs to describe the subjects, but the movement characterized by the manner verbs and the linguistic forms encoding the path information does not take place in the situations being discussed. The movement is fictive rather than factive. The sentences in (3-23), (3-24), and (3-25) demonstrate how the default verbs work.

(3-23) 这儿也是大伯公，那儿也是大伯公，大大小小的土地庙一路**盖过去**……

zhè-er yě   shì dà-bó-gōng,   nà-er   yě   shì
here   again is   Tua-Pek-Kong-Temple there   again is

dà-bó-gōng,   dà-dà-xiǎo-xiǎo-de tǔ-dì-miào yí-lù
Tua-Pek-Kong-Temple big-and-small   temple   all-the-way

gài-guò-qù…
build-across-go

Here is a Tua-Pek-Kong-Temple, and there is a Tua-Pek-Kong-Temple. Temples of various sizes were built along (something).

(3-24) 五颜六色的野花直**开到**天边。

wǔ-yán-liù-sè-de   yě-huā   zhí   **kāi-dào**   tiān-biān.
colourful   wild-flower   all-the-way   **blossom-to**   skyline

Colorful wild flowers blossomed all the way to the skyline.

(3-25) 另外有比较平缓的，相当宽阔的石级从瀑布旁侧的山林间，一路**往上铺砌**。

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[21] Default verbs are also observed for other types of fictive motion expressions in Chinese, such as *照射* (*zhào-shè*; shine) for sunshine in radiation paths and *看* (*kàn*; look) for the eyes in visual paths.

lìng-wài	yǒu	bǐ-jiào-píng-huǎn-de,	xiāng-dāng-kuān-kuò-de	shí-jí
besides	there-is	relatively-flat	rather-wide	stone-step

cóng	pù-bù-páng-cè-de	shān-lín-jiān,	yí-lù
from	waterfall-beside-ASSOC	wooded-mountain-between	all-the-way

wǎng-shàng   **pū-qù**
upwards   **pave**

Besides, there are relatively flat and rather wide stone steps paving upwards all the way from the wooded mountain beside the waterfall.

The uniqueness of the coextension path sentences with default verbs lies in the fact that each of the manner verbs in the above sentences can take the subject of the sentence as its direct object (for example, we can say 盖庙 [gài-miào; build a temple], 开花 [kāi-huā; come into flower], and 铺砌石级 [pū-qì-shí-jí pave the stone steps]) and that the configuration of the already existing objects under discussion is conceptualized as coming into existence gradually. In (3-23), the factive aspect is that there is a row of temples extending for a certain distance (maybe with other buildings in between), and it is very likely that they were built at different times. Linguistically speaking, the activity *build* is a consecutive and continuous activity, and this activity has begun at some time previous to the present time and is going on until an unknown time in the future. The configuration of those temples is fictively conceptualized as being built consecutively one by one along a spatial line when the sentence is produced. The same is true for the sentence in (3-24). The spatial distribution pattern of the flowers is conceptualized linguistically as a consecutive and continuous activity in the way that the flowers are blossoming one after another along some spatial line towards the skyline. Similarly, in the sentence in (3-25), the configuration of the already existing stone steps is conceptualized linguistically as that the stone steps are being paved upwards gradually when the producer of the sentence perceives the stone steps. In the three sentences, the manner verbs do not conflate any path information, and either a directional verb complement or a directional adposition is used to specify the path along which the activity happens step by step.

There are several manner verbs that do not belong to any of the above groups, and thus they are put in the miscellany group. Since such manner verbs are quite creative, the employment of them endows the sentence with a literary flavour. The sentences in (3-26) and (3-27) are two examples.

(3-26) 浩瀚的银河在广袤的原野上空缓缓滑行……

    hào-hàn-de   yín-hé   zài-guǎng-mào-de-yuán-yě-shàng-kōng
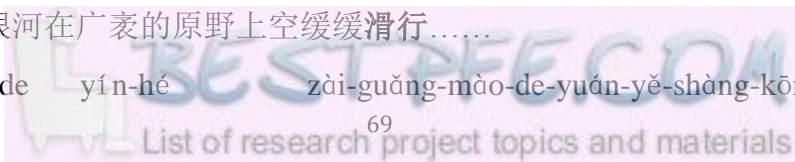
vast   Milky-Way   ZAI-broad-field-above

huǎn-huǎn   **huá-xíng**…
slowly   **glide**

The vast Milky Way glides above the broad field.

(3-27) 站在山坡的发球台上，纵览整个球道，时而**高奏凯旋**，时而又跌进冰谷……

zhàn   zài-shān-pō-de-fā-qiú-tái-shàng,   zòng-lǎn   zhěng-gè   qiú-dào,
stand   ZAI-the-tee-of-the-hillside-on   overlook   whole-CL   fairway

shí-ér   **gāo-zòu-kǎi-xuán**,   shí-ér   yòu diē-jìn   bīng-gǔ…
sometimes   **high-play-triumph-music**   sometimes also fall-into ice-valley

(I) stand at the tee on the hillside and overlook the whole fairway. Sometimes it rises up like triumphal music playing, and sometimes it falls into the ice valley.

The above discussed verb types, i.e., general motion verbs, path verbs, and manner verbs, all encode just one type of semantic element. As mentioned above, sometimes one verb encodes two semantic elements. For example, there are 140 tokens of verbs identified as encoding both path and manner information. For verbs containing only one morpheme, the morpheme itself is related with both manner and path. For instance, 蜿蜒 (*wān-yán*; zigzag) means something moves in a winding manner. As a monomorphemic word, it specifies the manner of the motion on the one hand, and on the other hand, the winding manner of the movement helps to suggest that the path of the movement is crooked rather than straight. Another example is 攀 (*pān*; climb-upwards). In contrast to the verb 爬 (*pá*; climb), 攀 (*pān*; climb-upwards) entails some path element. Normally 攀 (*pān*; climb-upwards) is employed to depict upwards motion while 爬 (*pá*; climb) does not conflate the specific path of the motion. Thus 攀 (*pān*; climb-upwards) specifies both manner and path information. The sentence in (3-28) illustrates the use of 蜿蜒 (*wān-yán*; zigzag), which encodes both path and manner information.

(3-28) 这里有著名的度假小镇金赛尔，**蜿蜒**3000 公里的海岸线如梦如幻。

zhè-lǐ   yǒu zhù-míng-de   dù-jià   xiǎo-zhèn jīn-sài-ěr,
here   have famous   resort   town   Kinsale

wān-yán-3000-gōng-lǐ-de   hǎi-àn-xiàn   rú-mèng-rú-huàn.
wind-3000-km-NOM   coastline   like-a-dream

Here is the famous resort town Kinsale, where the coastline winds for 3000 kilometres like in a dream.

For verbs composed of two morphemes, the encoding labour of manner information and path information is divided among the morphemes. For example, several verb predicates are

disyllabic words, in which one character specifies the path of the motion and the other one describes the manner of the motion, such as 横渡 (*héng-dù*, horizontally-cross-a-river), 下滑 (*xià-huá*, downwards-glide), 穿行 (*chuān-xíng*; run-through-walk), and 飞跨 (*fēi-kuà*, fly-cross). The sentence in (3-29) shows the case where 穿行 (*chuān-xíng*; run-through-walk) is used to specify both the path and manner information.

(3-29)　球道**穿行**于松林和沙地之间。

> qiú-dào　**chuān-xíng**　　yú-sōng-lín-hé-shā-dì-zhī-jiān.
> fairway　**through-walk**　ZAI-pinewood-and-sand-between

The fairway walks between the pinewood and the sand.

Apart from the combination of manner information and path information in one verb predicate, general motion information and path information is another possible combination. Only two verbs[22] are identified as encoding both general motion information and path information. They are illustrated in the sentences below in (3-30) and (3-31). No monomorphemic verb encoding general motion and path information was found. Both verbs in (3-30) and (3-31) are composed of two morphemes, with one expressing the general motion sense, and the other the path sense.

(3-30)　在南长涂沙滩西侧，关山南向**伸突**的部分，有一个天然石洞……

> zài-nán-cháng-tú-shā-tān-xī-cè,　guān-shān　　　nán-xiàng
> ZAI-South-Long-Beach-west　Guan-Mountain　south-towards

> **shēn-tū**-de-bù-fen,　　　yǒu　　　yí-gè　　　tiān-rán　　shí-dòng…
> **extend-protrude**-NOM-section　there-is　one-CL　　natural　　stone-cavern

At the west side of South Long Beach where Guan Mountain extends and protrudes towards the south, there is a natural stone cavern.

(3-31)　那些褐色的网状脉络约有 60 平方厘米，**铺散**开来，如同石头上被谁涂抹了岩花一般。

> nà-xiē　hè-sè-de　wǎng-zhuàng　mài-luò　yuē-yǒu　60-píng-fāng-lí-mǐ,
> those　brown　　reticular　　pattern　about　　60-square-centimetre,

> **pū-sàn**-kāi-lái,　　　　　rú-tóng-shí-tóu-shàng-bèi-shuí-tú-mǒ-le-yán-huā-yì-bān.
> **spread-scatter**-open-come　like-stone-on-BEI-someone-paint-PFV-flower

Those brown reticular patterns are about 60 square centimetres. It looks like they have been painted with flowers.

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[22] The two verbs are not represented in *Modern Chinese Dictionary* (6th edition). They are treated as verbs here based on the grammatical context.

3.3 Summary

This chapter presents a descriptive analysis of coextension path expressions in Modern Standard Chinese. It is found that the domains in which coextension path sentences are employed frequently include the domain of geography, meteorology, plants, architectures, and animals. Entities conceptualized as taking a coextension path can either be as large as mountain ranges or as small as the tendon of an animal, but most of them are large-scale entities. The concrete configuration of the Figure is not necessarily a continuously extending one and in some cases it is topologized by the conceptualizer as such. For coextension paths, the Ground characterizing the fictive movement of the Figure encompasses the Source location, the Path location, the Goal location, and the General location, among which the Goal location is by far the most frequently encoded.

The semantic elements encoded in verbs employed in coextension path expressions include the general motion information, the path information, and the manner information. In most cases, one verb encodes one type of semantic information listed above; and occasionally, one verb encodes two types of semantic elements, such as manner plus path information and general motion plus path information. Verbs encoding at least some path information (path verbs, manner plus path verbs, and general motion plus path verbs) account for 59.1%; and all verbs conveying at least some manner meaning (manner verbs and manner plus path verbs) take up only 16.6%, among which 9.3% encoding both manner and path information. All the verbs encoding some general motion information (general motion verbs, and general motion plus path verbs) occupy 33.7%. As demonstrated earlier, sentences employing general motion verbs normally adopt other linguistic forms to encode the path of the extension. This is also the case for sentences employing manner verbs. In most instances, coextension path expressions featuring manner verbs adopt other linguistic units to specify the path of the movement (Ma, 2014). Although there do exist a few sentences where no linguistic forms explicitly encode path information, usually some path information is inferable from the context (ibid). Therefore, path information is present in almost all coextension path expressions based on the sentences collected, and it is encoded in the verb in many cases (59.1%).

The examination of manner verbs reveals that some coextension path sentences are likely to be motivated by metaphoric mappings. Three metaphoric mappings are proposed based on the manner verbs and they are A SPATIALLY EXTENDED OBJECT IS AN ANIMAL, A

SPATIALLY EXTENDED OBJECT IS LIQUID, and A SPATIALLY EXTENDED ENTITY IS A FORCEFUL ENTITY.

CHAPTER 4 EMANATION PATHS

An emanation path pertains to "the fictive motion of something intangible emerging from a source. For most of its subtypes, the intangible entity continues along its emanation path and terminates by impinging on some distal object" (Talmy, 2000a, pp. 105-106). Emanation path expressions are a large family encompassing four subtypes and even more detailed types under those four subtypes (Talmy, 2000a, p. 106). There are altogether 1218 sentences involving an emanation path. Table 4.1 illustrates the subtypes of emanation paths and the corresponding numbers of collected sentences.

Table 4.1   Subtypes of emanation paths and numbers of collected sentences

orientation paths	prospect paths	180	229
	demonstrative paths	15	
	targeting paths	10	
	line of sight	7	
	alignment paths	17	
radiation paths		324	
shadow paths		47	
sensory paths	visual paths	288	618
	auditory paths	198	
	olfactory paths	121	
	tactile paths	9	
	gustatory paths	2	
emanation paths		1218	

The analysis of emanation paths will be conducted for each subtype in the order as listed in the above table, namely, orientation paths, radiation paths, shadow paths, and sensory paths.

4.1 Orientation Paths

Orientation paths are one type of emanation paths that are further categorized into prospect paths, alignment paths, demonstrative paths, targeting paths, and the line of sight. Orientation paths are defined as the linguistic conceptualization "of a continuous linear intangible entity emerging from the front of some object and moving steadily away from it" (Talmy, 2000a, p. 106). The five subtypes of orientation paths are different from each other in terms of several aspects, such as whether the front of the object under discussion is conceptualized as a face type or a point type; the function of the sentence; whether intention is involved; and other features of the object under discussion. There are 229 sentences identified as orientation paths from the data, among which 180 are prospect paths. The other four types of orientation paths

are observed scarcely. Although the data source for this study probably influences the occurrence of some orientation path expressions, the extremely low frequencies of some types still indicate that they occur relatively less compared with other types. In the following description, the four less frequently observed types of orientation paths will be discussed first and prospect paths will be analysed in Section 4.1.5.

4.1.1 Alignment paths

An alignment path is used to describe the orientation of a straight linear entity with a point-like front. A fictive entity is conceptualized as emerging from the front of the linear entity and moving along its axis with respect to some object. There are only 17 examples of alignment paths collected, and 16 of them employ the same verb, i.e., 指 (*zhǐ*; point-to), as illustrated in the following sentence in (4-1). In this sentence, the coral reef is conceptualized linguistically as having an axis that points from northeast to southwest. The fictive motion effect lies in the imagined fictive entities extending from each end of the coral reef and moving towards the northeast and southwest respectively.

(4-1)   南海的珊瑚礁构成体的长轴都**指向**东北-西南方向。

nán-hǎi-de   shān-hú-jiāo-gòu-chéng-tǐ-de   cháng-zhóu   dōu
South-Sea-ASSOC   coral-reef-formation-ASSOC   long-axis   all

zhǐ-xiàng   dōng-běi-xī-nán   fāng-xiàng.
point-towards   northeast-southwest   direction

The long axes of the coral reef formations in the South Sea all point from the northeast towards the southwest.

4.1.2 Demonstrative paths

Demonstrative paths are also used to describe linear objects with a point-type front, but the fictive line that is conceptualized as extending from the point-type front functions to provide a guide to people's attention. Fifteen sentences are identified as demonstrative paths. Thirteen demonstrative path sentences contain the verb 指 (*zhǐ*; point-to), as shown in the sentence in (4-2), and the other two sentences involve a demonstrative path implicitly, as shown in the sentence in (4-3). In the sentence in (4-2), the arrow on the board is a linear entity with a point-like front, from which an intangible line emerges. The arrow serves to guide people's attention to the place the arrow points to. In the sentence in (4-3), the preposition 顺着 (*shùn-*

zhe; along) suggests that there is an intangible line emerging from the signpost that extends towards the old building.

(4-2) ……绿灯的下方，钉着另一块牌子，褐色的箭头**指向**另一个方向："由此前往波阿斯火山。"

…lǜ-dēng-de   xià-fāng,   dìng-zhe   lìng-yī-kuài   pái-zi,   hè-sè-de
green-light-ASSOC lower-side pin-DUR   another   plate   brown

jiàn-tóu **zhǐ-xiàng**   lìng-yī-gè fāng-xiàng: "yóu cǐ   qián-wǎng
arrow   **point-towards** another   direction   from here head-for

bō-ā-sī-huǒ-shān."
Poas-Volcano

There is another plate pinned under the green light, (on which) the brown arrow points towards another direction (and it reads) "to Poas Volcano from here".

(4-3) **顺着**指示牌往前走，不久见到一幢老楼。

shùn-zhe   zhǐ-shì-pái   wǎng-qián   zǒu, bù-jiǔ   jiàn-dào
follow-DUR   sign   forward   walk soon   see

yī-zhuàng   lǎo-lóu.
one-CL   old-building

(I) walked forward following the sign and soon saw an old building.

4.1.3 Targeting paths

The uniqueness of targeting paths is that the intention of the Agent is involved. The object with a front is oriented by the Agent intentionally towards some direction. In this case, a fictive line is conceptualized as extending from the front of the object and moving towards the place specified by other grammatical forms. Ten targeting path sentences are collected from the written data. The entities described in targeting paths include guns, spears, machetes, telescopes, convex lens, and cameras. The verbs used in targeting paths include 对 (*duì*, direct-to), 刺 (*cì*, stab), 逼 (*bī*; press), 望 (*wàng*; look), 透过 (*tòu-guò*, penetrate), and 收 (*shōu*; draw-into). Below are two sentences illustrating how targeting paths are expressed. In the sentence in (4-4), the gun is set by the unmentioned Agent to orient towards the crossing and a fictive line is conceptualized linguistically as emerging from the gun towards the crossroad, following which further factive motion may occur. In the sentence in (4-5), a fictive line is conceptualized as extending from the camera lens towards the scenery and then taking the scenery back into the camera.

(4-4) 头顶岗楼上的机枪，正**对准**路口。

tóu-dǐng	gǎng-lóu-shàng-de	jī-qiāng,	zhèng	**duì-zhǔn**
overhead	watchtower-on-ASSOC	machine-gun	right	**aim-at**

lù-kǒu.
crossing

The machine guns on the watchtower overhead aim right at the crossing.

(4-5) 扛着单反来到基隆的……海岸将美景尽**收**镜头中。

káng-zhe	dān-fǎn		lái-dào	jī-lóng-de…	hǎi-àn
carry-DUR	single-lens-reflex-camera		come-to	Keelung-ASSOC	coast

jiāng	měi-jǐng	**jìn-shōu**	jìng-tóu-zhōng.
BA	beautiful-scenery	all-**draw-into**	camera-lens-in

(I) came to the coast in Keelung carrying a SLR and drew all the beautiful scenery into the camera.

4.1.4 Line of sight

As the name implies, this type of orientation paths involves a visual apparatus from which a fictive line emerges. Seven sentences from the written data are identified as depicting the line of sight. All the seven sentences describe the lateral motion of the eyesight, as shown in the sentence in (4-6). In this sentence, the intangible eyesight is conceptualized as sweeping across the forest.

(4-6) 飞行高度只有几百米，杰夫的目光来回**扫视**着机翼下的森林。

fēi-xíng-gāo-dù	zhǐ-yǒu	jǐ-bǎi-mǐ,	jié-fū-de	mù-guāng
flight-height	only	several-hundred-meter	Jeff-ASSOC	eye-light

lái-huí	**sǎo-shì**-zhe	jī-yì-xià-de	sēn-lín.
back-and-forth	**sweep-look**-DUR	wing-under-NOM	forest

The flight height is only several hundred meters, and Jeff is running down the forest under the wing.

4.1.5 Prospect paths

In situations described with prospect paths, the orientation of an object with a face-type front with respect to its surroundings is linguistically conceptualized in such a way that an intangible line or shaft emanates from it and moves towards its surroundings. The geographical locations of both the object with a face-type front and the object with respect to which the intangible line moves are fixed ones relative to the earth.

4.1.5.1 Participants in prospect paths

In Table 4.2 that shows the participants in prospect path expressions, three types of participants are differentiated including the Source location, the Goal location, and the Path location. The Figure in prospect paths is not only semantically fictive, but also linguistically absent. Due to the nature of prospect paths, the distinction between the Source location and the Goal location is not that obvious in some cases, as shown in the sentences in (4-7) and (4-8). In (4-7), the relative position of the railway station and the town is conceptualized as the two entities looking at each other. In this case, the two entities are conceptualized as both the Source location and the Goal location simultaneously. In the sentence in (4-8), the mountains on both sides of the river are conceptualized as facing each other. Although two entities are involved in this prospect path where each of them is located at one side of the river, the two entities are conflated into one noun phrase. In this case, both of the two entities act as the Source location and the Goal location at the same time.

(4-7) 哈尔施塔特的**火车站**与哈尔施塔特**镇**隔湖**相望**。

hā-ěr-shī-tǎ-tè-de **huǒ-chē-zhàn** yǔ hā-ěr-shī-tǎ-tè-**zhèn**
Hallstatt-ASSOC **railway-station** with Hallstatt-**town**

gé hú **xiāng-wàng**.
across lake **look-at-each-other**

The railway station of Hallstatt and its residence zone look at each other across the lake.

(4-8) 桥两岸**山峦对峙**，绿树成荫。

qiáo liǎng-àn **shān-luán** **duì-zhì**, lǜ-shù
bridge two-side **mountain-range confront-each-other** green-tree

chéng-yīn.
form-shade

The mountain ranges at both sides of the bridge confront each other, and the trees offer pleasant shade.

Table 4.2   Examples of participants in prospect path expressions

Source locations	盆地 (pén-dì; basin)	山峦 (shān-luán; mountain-range)	土地 (tǔ-dì; land)	断崖 (duàn-yá, bluff)	冰川 (bīng-chuān; glacier)
	广场 (guǎng-chǎng; square)	阳台 (yáng-tái; balcony)	午门 (wǔ-mén; Meridian-Gate)	窗户 (chuāng-hù, window)	印度 (yìn-dù, India)

Goal locations	高原 (*gāo-yuán*; plateau)	绝壁 (*juébì*; cliff)	大海 (*dà-hǎi*; sea)	太阳 (*tài-yáng*; sun)	南 (*nán*; south)
	广场 (*guǎng-chǎng*; square)	城楼 (*chéng-lóu*; gate-tower)	胡同 (*hú-tòng*; alley)	宫殿 (*gōng-diàn*; palace)	日本 (*rìběn*; Japan)
Path locations	海 (*hǎi*; sea)	江 (*jiāng*; river)	路 (*lù*, road)	窗 (*chuāng*; window)	海峡 (*hǎi-xiá*; strait)

Prospect paths are employed to describe entities or situations on both the macro and the micro levels, though large-scale entities dominate. In the sentence in (4-9), entities as large as a continent are depicted in terms of prospect paths. The relative position of Asia and Oceania is conceptualized linguistically as such that the two continents are looking towards each other. In the sentence in (4-10), the orientations of entities as small as the valves are described in the manner as if an intangible line emanates from the valve and moves towards the entity with respect to which the valve orients.

(4-9)　亚洲南面隔海与**大洋洲相望**。

> **yà-zhōu** nán-miàn gé hǎi yǔ **dà-yáng-zhōu** **xiāng-wàng**.
> **Asia** south-side across sea with **Oceania** **look-at-each-other**

Asia and Oceania look at each other across the sea.

(4-10)　这些**瓣膜**就像你家的门一样，只能**朝**一个方向**开**：**房室瓣**只能**朝**心室**开**，**动脉瓣**只能**朝向**动脉**开**。

> zhè-xiē **bàn-mó** jiù-xiàng nǐ-jiā-de mén yí-yàng, zhǐ néng
> these **valve** like your-house-ASSOC door same only can

> **cháo** yī-gè fāng-xiàng **kāi**: **fáng-shì-bàn** zhǐ néng
> **towards** one-CL direction **open atrioventricular-valve** only can

> **cháo** xīn-shì **kāi**, **dòng-mài-bàn** zhǐ néng **cháo-xiàng**
> **towards** ventricle **open** **aortic-valve** only can **towards**

> dòng-mài **kāi**.
> aorta **open**

These valves are like the doors of your house (in that they) can only open in one direction. The atrioventricular valve can only open towards the ventricle and the aortic valve can only open towards the aorta.

The prototypical Source location in prospect paths is an entity with a face-type front, and the prototypical path of the fictive motion is from this face-type front of the entity to another distal entity with respect to which the entity with a face-type front has a prospect or exposure. In the prospect path sentence in (4-11), the Source location, which is the White House, is an

entity with a face-type front, and the fictive motion is from this face-type front to another entity. Not all the collected prospect path sentences describe a prototypical Source location and a prototypical path. In some cases, the dimension of the Source location from which the fictive line emerges is not the face-type front of that Source location, as illustrated in the sentences in (4-12) and (4-13).

(4-11) **白宫**……与高耸的华盛顿纪念碑**相望**。

        bái-gōng…   yǔ   gāo-sǒng-de   huá-shèng-dùn-jìniàn-bēi
        White-House with   towering   Washington-Monument

        xiāng-wàng.
        look-at-each-other

        The White House and the towering Washington Monument look at each other.

(4-12) 连绵的**沙丘**……背倚葱茏青山，**面临**蓝绿色的雅鲁藏布江。

        lián-mián-de   **shā-qiū**…   bèi-yǐ   cōng-lóng   qīng-shān,
        continuous   **sand-dune** back-lean   verdant   green-mountain

        miàn-lín   lán-lǜ-sè-de   yǎ-lǔ-zàng-bù-jiāng.
        face   green   Yarlung-Zangbo-River

        The continuous sand dunes lean against the green mountains and face the green Yarlung Zangbo River.

(4-13) 除了中国的野生郁金香共 16 种，**分布区**分为遥遥**相望**的东西两片。

        chú-le   zhōng-guó-de   yě-shēng   yù-jīn-xiāng   gòng   16-zhǒng,
        in-addition-to Chinese   wild   tulip   in-total   16-type

        fēn-bù-qū   fēn-wéi   yáo-yáo-**xiāng-wàng**-de
        distribution-area   divide-into   across-distance-**look-at-each-other**-NOM

        dōng-xī   liǎng-piàn.
        east-west   two-area

        There are 16 types of wild tulip in addition to the Chinese tulip, and they are divided into the east area and west area that look at each other across a long distance.

In (4-12), the face-type front of the sand dunes is more likely to face upwards towards the sky. Linguistically, the sand dunes are conceptualized as facing the river. In effect, the entities that face the river are not the sand dunes alone, but the prospect formed together by the mountains and the sand dunes. In the sentence in (4-13), the two tulip fields are conceptualized as looking at each other. The horizontal dimension of a tulip field that faces the sky is probably more like a face-type front because of two reasons. One is that the area of that dimension is the biggest; and the other is that the flowers are facing upwards. However, when the relative position of two tulip fields is of interest, they can be conceptualized as two cubes looking at

each other, in which case an intangible line fictively moves between the vertical dimensions of the cubes composed of tulips.

In some cases, the entity whose orientation is under discussion is a complex composed of many concrete entities. It is the complex as a whole that is conceptualized as an entity with a face-type front, from which an intangible line or shaft emanates. In the sentence in (4-14), a fictive line is conceptualized as moving between two territories, whose face-type fronts are facing upwards towards the sky. Perceptually speaking, there should be many constructions on each territory under discussion. The territories together with the constructions on them are conceptualized as two cubes, though what are encoded linguistically as looking at each other are merely the territories.

(4-14) 这部分原本属于海西州的**土地**，却嵌在玉树州的内部，而**与海西州**遥遥**相望**。

> zhè-bù-fen yuán-běn shǔ-yú hǎi-xī-zhōu-de
> this-part in-terms-of-administration belong-to Haixi-State-NOM
>
> **tǔ-dì**, què qiàn zài-yù-shù-zhōu-de-nèi-bù, ér **yǔ**
> **land** but embed ZAI-Yushu-State-ASSOC-inside but **with**
>
> **hǎi-xī-zhōu** yáo-yáo **xiāng-wàng**.
> **Haixi-State** across-distance **look-at-each-other**

> This area of land administered by the Haixi State is embedded in the Yushu State and looks at the Haixi State across a long distance.

Those non-prototypical Source locations and prospect paths show that the Source location in prospect paths are not necessarily an entity with a face-type front, and that the Source location of the fictive motion does not have to be the face-type front of the entity. When an entity is described with a prospect path, it is conceptualized as an entity with a face-type front, from which a fictive line emerges.

4.1.5.2 *Verbs and metaphors in prospect paths*

Table 4.3 illustrates some examples of the verbs employed in prospect paths. There are 167 tokens and 49 types of verbs employed in prospect path expressions. Generally speaking, verbs employed in prospect path expressions are grouped into general facing verbs[23] and manner verbs. The verbs encoding general facing information account for more than 40% of all the verbs employed. The best English translation of the general facing verbs in the

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[23] Some of the general facing verbs can also function as prepositions expressing similar meaning, such as 对 (*duì*; face/towards), 朝 (*cháo*; face/towards), and 向 (*xiàng*; face/towards). They can be used either as verbs or prepositions in prospect paths (Lv, 1999, pp. 115, 182, 578), and only those that function as verbs are analysed here.

sentences is "face" or "look", but their literal meaning is not "face" or "look". What they mean is "towards" or "direct at". That is the reason why they are not grouped as manner verbs. The meaning of these verbs suggests that the entity encoded by the noun phrase under discussion has a face-type front that bears the prospect on some other entity, as shown in the sentences in (4-15), (4-16), and (4-17).

(4-15) 午门还残存着，遥遥直**对**洪武门的城楼。

wǔ-mén　　　　hái　cán-cún-zhe,　yáo-yáo　　　zhí**duì**
Meridian-Gate　　still　survive-DUR　across-distance　directly-**face**

hóng-wǔ-mén-de　　chéng-lóu.
Hongwu-Gate-ASSOC　gate-tower

The Meridian Gate is still standing and directly faces the gate tower of Hongwu Gate across a great distance.

(4-16) 葵花朵朵**向**太阳。

kuí-huā　　duǒ-duǒ　**xiàng**　tài-yáng.
sunflower　　CL-CL　　**face**　　sun

The sunflowers are all facing the sun.

(4-17) 窗是**朝**东的。

chuāng　shì　**cháo**　dōng-de.
window　is　**face**　east

The window faces east.

In the sentence in (4-15), the Meridian Gate is conceptualized as being directed at the gate tower of another gate. The Meridian Gate has a face-type front from which a fictive line is conceptualized as emerging and moving towards another entity. In the sentence in (4-16), the sunflowers are conceptualized as directing at the sun. The asymmetrical structure of a flower makes it easy to choose which dimension of it is the front side or the face. Fictive lines are conceptualized as emerging from the face-type front of the flowers and moving towards the sun. In the sentence in (4-17), the fictive line or shaft is conceptualized as emanating from the window and moving towards the east. A window is a planar-like entity with two sides and the vista of a window is usually defined as the direction a person looks at when located at the inside of the building with the window.

Table 4.3　Examples of verbs in prospect path expressions

general facing verbs (40.1%)	对 (*duì* face)	对峙 (*duì zhì* confront)	向 (*xiàng*; face)	朝 (*cháo*; face)

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manner verbs (59.9%)	**looking verbs** (31.1%)	对望 (*duì-wàng*; face-look)	望 (*wàng*; look)	瞰视 (*kàn-shì*, overlook)	眺望 (*tiào-wàng*; overlook)	相望 (*xiāng-wàng*; look-at-each-other)
	facing verbs (23.4%)	面对 (*miàn-duì*, face)	面临 (*miàn-lín*; face)	面朝 (*miàn-cháo*; face-towards)	面迎 (*miàn-yíng*; face-welcom)	面 (*miàn*; face)
	animal verbs (1.8%)	立 (*lì*, stand)			坐 (*zuò*, sit)	
	default verbs (0.6%)	建 (*jiàn*; build)				
	opening verbs (3.0%)	开 (*kāi*; open)			敞开 (*chǎng-kāi*; wide-open)	

There are five types of manner verbs, i.e., looking verbs, facing verbs, animal verbs, default verbs, and opening verbs. As the name suggests, looking verbs all involve the meaning *look*, and they take up more than 30% of all the verbs employed. As discussed later in Section 4.4.1, when looking verbs are used in sensory paths, normally the direction of the fictive motion is from the eyes to the scenery being perceived. Similarly, for prospect path expressions containing looking verbs, the entity under discussion is conceptualized as possessing eyes that emit a fictive line out onto another entity. The sentence in (4-18) contains the looking verb 相望 (*xiāng-wàng*; look-at-each-other), which indicates that both of the two entities are conceptualized as animals with eyes, and that a fictive line moves from each of them towards the other.

(4-18)　亚洲南面隔海与大洋洲**相望**。

　　　yà-zhōu nán-miàn gé　　hǎi　yǔ　dà-yáng-zhōu **xiāng-wàng**.
　　　Asia　　south-side across　sea　with Oceania　　**look-at-each-other**

　　　Asia and Oceania look at each other across the sea.

Facing verbs are different from general facing verbs in that they are more closely related to the meaning *face* because the character 面 (*miàn*; face) is contained. Many inanimate entities are conceptualized as having a face, and this dimension that is conceptualized as the face is usually taken to be the front of that entity (Talmy, 2000a, p. 107). In this case, the entity under discussion is conceptualized again as an animal, but the part of the animal being

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focused on is not the eyes, but the face, as demonstrated in the sentence in (4-19). In (4-19), the waterfall is conceptualized as having a face-type front that directs at the cliff.

(4-19) 瀑布所以壮观，是因为它**面对**悬崖，却有绝处求生的勇气。

pù-bù	suǒ-yǐ	zhuàng-guān,	shì-yīn-wéi	tā	**miàn-duì**
waterfall	the-reason-why	spectacular	is-because	it	**face**

xuán-yá,	què	yǒu	jué-chù-qiú-shēng-de	yǒng-qì.
cliff	but	have	desperate-situation-seek-to-live-on-NOM	courage

The reason why the waterfall is spectacular is that although facing the cliff, it has the courage to seek to live on in a desperate situation.

There are two types of animal verbs, i.e., 坐 (zuò; sit) and 立 (lì; stand), which conceptualize the entity under discussion as an animal but do not convey the motion sense. The prospect path is encoded in the adverbial modifier before the verb, as shown in the sentences in (4-20) and (4-21). Both of the sentences employ the pattern *AA ér B*, where *AA* is an adverbial phrase modifying the action encoded by the verb phrase in *B* (as discussed in Section 2.3.3). In (4-20), the two churches are standing in the manner that they are looking at each other. In (4-21), the city is described as an animal who is sitting in the manner of facing the south.

(4-20) 在 Russell 和柯林斯街交叉口的东北角和西北角，墨尔本最古老的两座教堂**相望而立**。

zài-Russell-hé-kē-lín-sī-jiē-jiāo-chā-kǒu-de-dōng-běi-jiǎo-hé-
ZAI-Russell-and-Collins-Street-intersection-NOM-northeast-corner-and-

xī-běi-jiǎo,	mò-ěr-běn	zuì-gǔ-lǎo-de	liǎng-zuò	jiào-táng
northwest-corner	Melbourne	oldest	two-CL	church

xiāng-wàng	**ér**	**lì.**
looking-at-each-other	**in-the-manner-of**	**stand**

At the northeast and northwest corner of the intersection of Russell and Collins Streets, the two oldest churches in Melbourne stand looking at each other.

(4-21) 北京是一个典型的中国式京城：背靠长城，**面南而坐**。

běi-jīng	shì	yī-gè	diǎn-xíng-de	zhōng-guó-shì	jīng-chéng:
Beijing	is	one-CL	typical	Chinese-style	city

bèi-kào	cháng-chéng,	**miàn-nán**	**ér**	**zuò.**
back-lean-against	Great-Wall	**face-south**	**in-the-manner-of**	**sit**

Beijing is a typical city with Chinese style. It leans against the Great Wall and faces south...

The same pattern *AA ér B* is employed in the sentence containing the default verb 建 (jiàn; build), as illustrated in the sentence in (4-22), which describes the two screens as being built

in the manner of facing each other. The verb 建 (*jiàn*; build) is labelled as a default verb because it is the default verb to describe the construction of screens.

(4-22)　两块高 15 米的 LED 显示屏**相对而建**。

> liǎng-kuài　　gāo　15-mǐ-de　　　LED xiǎn-shì-píng
> two-CL　　　　high　15-meter-NOM　LED screen
>
> **xiāng-duì**　　　**ér**　　　　　　　　**jiàn**.
> **facing-each-other**　**in-the-manner-of**　　**build**
>
> The two LED screens with the height of 15 meters were built facing each other.

The two verbs in the "opening verbs" group occur scarcely. Both of them express the meaning *open*. Not conveying motion sense themselves, opening verbs express the fictive motion sense by combining with other grammatical elements. In the sentence in (4-23), the flower is conceptualized as an entity with a face-type front that opens and looks into the sky. The noun phrase 面孔 (*miàn-kǒng*; face) and another verb phrase 仰望 (*yǎng-wàng*; upwards-look) both contribute to the expressing of fictive motion. In the sentence in (4-24), it is the adpositional phrase 向 (*xiàng…*; towards…) after the verb that conveys the fictive motion sense.

(4-23)　这是一种低矮、率直、欢乐的花，它面孔**敞开**，**仰望**天空。

> zhè　　shì　yī-zhǒng　dī-ǎi,　　shuài-zhí　huān-lè-de　huā,　　　tā
> this　　is　a-type　　short　　frank　　　happy　　flower　　it
>
> miàn-kǒng　**chǎng-kāi**,　　**yǎng-wàng**　tiān-kōng.
> face　　　　**open**　　　　　**look-up–at**　sky
>
> This is a type of short, frank, and happy flower, which opens its face and looks up into the sky.

(4-24)　店中的墙头还有**开向**后院马厩的镂花窗子。

> diàn-zhōng-de qiáng-tóu　hái　yǒu　**kāi-xiàng**-hòu-yuàn-
> store-in-NOM wall　　　　also　have　**open-towards**-backyard-
>
> mǎ-jiù-de　　lòu-huā　　　　　　chuāng-zi
> stable-NOM　ornamental-engraving　window
>
> There are also windows with ornamental engravings on the wall of the store, which open towards the stable at the backyard.

When an entity is depicted with prospect paths, they are frequently conceptualized as animals under the mapping AN ENTITY WITH A FACE-TYPE FRONT IS AN ANIMAL. All the sentences employing looking verbs, facing verbs, and animal verbs are instantiations of this metaphoric mapping. Looking verbs and facing verbs emphasize on different parts of an

animal with looking verbs focusing on the eyes and facing verbs concentrating on the face. The sentences in (4-25) and (4-26) show that the entity described with prospect paths are conceptualized as an animal with eyes. In the sentence in (4-25), the house is conceptualized as having a face-type front with eyes, from which a fictive line or shaft emerges and moves towards the town down the hills. In the sentence in (4-26), one side of the mountain is described as the face-type front that looks down at the view of the city.

(4-25) 一栋很大的老房子**眺望**着山下的城。

yī-dòng hěn dà-de   lǎo fáng-zi **tiào-wàng**-zhe
one-CL very big   old house   **overlook**-DUR

shān-xià-de   chéng.
mountain-down-NOM   town

A very big old house on the mountain is overlooking the town.

(4-26) （桐君山）地处在桐溪东岸……西岸便**瞰视**着桐庐县市的人家烟树。

(tóng-jūn-shān)   dì-chǔ   zài-tóng-xī-dōng-àn…
(Tongjun-Mountain) located   ZAI-Tong-Creek-east-bank

xī-àn   biàn **kàn-shì**zhe   tóng-lú-xiàn-shì-de   rén-jiā-yān-shù.
west-bank   right **overlook**-DUR Tonglu-City-ASSOC   house-and-people

Tongjun Mountain is located on the east bank of Tong Creek, and its west bank is overlooking the houses and people of Tonglu.

The sentences in (4-27) and (4-28) demonstrate the case where the entities described with prospect paths are conceptualized as an animal, and it is the face of the animal from which the fictive line or shaft emanates. In many cases, apart from a face-type front, the entity is also conceptualized as having a back. In the sentence in (4-27), the temple is conceptualized as an animal that faces the sea and whose back is adjacent to a hill. In the sentence in (4-28), cities are conceptualized as animals. The location of Beijing is described as an animal that faces south and whose back is against the Great Wall. Shanghai is depicted not only as facing the ocean, but also as directing its face towards the east.

(4-27) 它（妈阁庙）**背**山**面**海。

tā (mā-gé-miào)   **bèi**-shān-**miàn**-hǎi.
it (A-Ma-Temple) **back**-against-mountain-**face**-sea

The A-Ma Temple faces the sea with the mountain as the background.

(4-28) 北京是一个典型的中国式京城：**背**靠长城，**面**南而**坐**……上海正相反，它**侧脸**向东，**面对**着一个浩瀚的太平洋。

běi-jīng shì yī-gè   diǎn-xíng-de   zhōng-guó-shì jīng-chéng:

Beijing	is	a-CL	typical	Chinese-style	city

běi-kào chǎng-chéng, **miàn**-nán ér **zuò**…shàng-hǎi
back-lean-against Great-Wall **face**-south in-the-manner-of **sit** Shanghai

zhèng xiāng-fǎn, tā **cè-liǎn** **xiàng**-dōng, **miàn-duì**zhe
right opposite it **turn-face** **towards**-east **face**-DUR

yī-gè hào-hàn-de tài-píng-yáng.
one-CL vast Pacific-Ocean

Beijing is a typical city with Chinese style. It leans against the Great Wall and faces south. Shanghai is located in the opposite way. It turns its face towards the east and faces the vast Pacific Ocean.

In the sentences in (4-20) and (4-21) above and (4-29) below, the entity under discussion is conceptualized as an animal as a whole that sits or stands facing somewhere, but neither the face nor the eyes are emphasized.

(4-29) 北方的房屋大多数坐北朝南。

běi-fāng-de fáng-wū dà-duō-shù **zuò**-běi-**cháo**-nán.
northern house mostly **sit**-agains-north-**face**-south

Most houses in the north part faces southward.

The metaphoric mappings involved in prospect paths are experientially based. In sentences from (4-25) to (4-29) as well as (4-20) and (4-21), the entities described with prospect paths are all conceptualized as an animal, and they emphasize different but related parts of an animal. Sentences (4-25) and (4-26) emphasize on the eyes of the animal. Sentences (4-27) and (4-28) focus on the face, and there is no particular focus in (4-20), (4-21), and (4-29). The asymmetrical structures and the movement patterns of animals make it self-evident to determine which side of it is the front. Usually, the side of an animal where the face is located is considered to be the front, probably because the sensory organs that are responsible for receiving information from the external world are on the face. Most of the information we receive are visual information through the eyes. Therefore, the direction where we are looking at determines the orientation of our face, and in many cases, also our body.

4.2 Radiation Paths

Radiation paths occur when light in non-scientific contexts is described as the "radiation emanating continuously from an energy source and moving steadily away from it" (Talmy, 2000a, p. 111). The following example is a radiation path expression from (Talmy, 2000a, p. 112):

(4-30)   The light is shining (from the sun) into the cave/onto the back wall of the cave.

The situations described in sentence (4-30) are perceived as static, but through the employment of directional prepositions, we conceptualize the situations as dynamic processes in which light moves from one place to another. It might be argued that light indeed moves in the form of waves or photons so that technically speaking the movement of light is factive rather than fictive, but this process normally cannot be perceived by human beings (Talmy, 2000a). Therefore, the dynamic linguistic description is a reflection of the dynamic and fictive conceptualization of light that contrasts with our static perception.

I am distinguishing two types of radiation paths based on the nature of the light source. Type I is radiation paths discussed in Talmy (2000a), as illustrated in (4-30), in which the light source is construed as possessing the features of an illuminant, such as sending out visible light rays, radiating heat, illuminating an area, etc. On the other hand, the light sources in Type II radiation paths do not emit light rays themselves; instead, they reflect the light rays that strike them from the light sources of the first type. Further, the linguistic reference points characterizing the fictive movement in Type I radiation paths are more varied, ranging from geographical locations, to architectural structures, to body parts, and anything that is possible to be struck by the light; but the reference points in Type II radiation paths are either absent for some situations as shown in (4-31) or are entities with a flat surface that are capable of reflecting images of a scene, such as the water in (4-32). Type I radiation paths is much more frequently encoded than Type II radiation paths in that 306 out of 324 radiation path sentences in the data encode a Type I radiation path.

(4-31)   一池卤水**映出**了万里晴空。

    yìchí   lǔ-shuǐ   **yìng-chū-**le   wàn-lǐ-qíng-kōng.
    one-CL brine   **mirror-out-**PFV   clear-boundless-sky

    A brine lake mirrored the boundless clear sky.

(4-32)   青山的影子冷冷地**沉**在水里。

    qīng-shān-de   yǐng-zi   lěng-lěng-de   **chén** zài-shuǐ-lǐ.
    green-hills-GEN   image   coldly   **sink** ZAI-water-in

    The image of the green hills sinks into the water coldly.

The linguistic features of radiation path sentences are delineated in terms of three aspects, including the participants involved (Section 4.2.1), the verbs (Section 4.2.2), and metaphors (Section 4.2.3).

4.2.1 Participants in radiation paths

Table 4.4 below displays the typical participants in Type I and Type II radiation paths. The participants involved in Type I radiation paths mainly include the Figure, the Agent, and the Ground that further encompasses the Source location, the Path location, and the Goal location. The Figure is usually the light rays in various forms (such as sunshine, lamplight, and beams), but sometimes the light source is metonymically conceptualized as the Figure, as shown in the sentence in (4-33). This sentence describes the sun as passing through the clouds, but it is implausible for the sun to be the Figure since there is only one sun that is perceived as being above in the sky by our naked eyes. Here the word for the light source is used metonymically to refer to the light rays sent out by it. This can be evidenced by the verbal phrase 照在了它身上 (*zhào-zài-le-tā-shēn-shàng*; shine-onto-it) in the second clause in (4-33), which generally takes a subject expressing light rays, because what shines onto an entity can only be light rather than a light source. Since this verbal phrase shares the same subject with the first clause, the subject of the first clause should also signify the light rays.

(4-33) 那是因为太阳**穿过**云层，直接**照在**了它身上。

nà	shì	yīn-wéi	tài-yáng	**chuān-guò**	yún-céng,	zhíjiē
that	is	because	sun	**pass-through**	cloud-layer	directly

zhào	**zài**-le-tā-shēn-**shàng**.
shine	**ZAI**-PFV-it-**on**

That is because the sun passes through the clouds and shines onto it directly.

The entity functioning as the Agent in Type I radiation paths is the light source that is conceptualized as being able to control the light rays, as illustrated in the sentence in (4-34). In this sentence, the sun serves as the Agent that causes the movement of the light rays.

(4-34) **朝日**又**把**万道金光**射向**湖面了。

zhāo-rì	yòu	**bǎ**	wàn-dào	jīn-guāng	**shè-xiàng**
morning-sun	again	**BA**	countless	golden-rays	**shoot-towards**

hú-miàn	le.
lake-surface	CRS

The morning sun again shoots countless golden rays towards the lake surface.

The Source location, Path location, and Goal location serve to specify the reference points with respect to which the Figure moves. The default Source location of the fictive motion conducted by the light rays is the light source, but some sentences merely profile a certain limited span of the journey that the movement of the Figure covers, as shown in the sentence

in (4-35). In (4-35), although the real source of the fictive movement on the part of sunshine is the sun, only the journey from the grotto entry to the inside of it is focused on. In this case, the grotto entry can be regarded as the linguistic Source location of the fictive movement.

(4-35)　上午 10 点，温暖的阳光**从窟门**一束束**挤进来**。

　　　shàng-wǔ　　shí-diǎn,　wēn-nuǎn-de　　yáng-guāng　　**cóng kū-mén**
　　　morning　　　ten-o'clock warm　　　　　　sunshine　　　**from grotto-entry**

　　　yí-shù-shù　　**jǐ-jìn-lái**.
　　　one-CL-CL　　**squeeze-in-come**

　　　At ten o'clock in the morning, beams of warm sunshine squeezed in from the entry to the grotto.

The Source locations, Path locations, and Goal locations include various types of entities that are possible for the light rays to strike, encompassing plants, body parts exposed to the light rays, geographical locations, architectural structures, meteorological phenomena, etc. In terms of the frequency of occurrence, the Goal location is the most frequently encoded followed by the Path location, and the Source location, the least.

Table 4.4　Examples of participants in radiation path expressions

Type I Radiation Paths						
Figure		阳光 (*yáng-guāng*; sunshine)	太阳 (*tài-yáng*; sun)	月光 (*yuè-guāng*; moon-light[24])	激光 (*jī-guāng*; laser-light)	灯光 (*dēng-guāng*; lamplight)
Agent		太阳 (*tài-yáng*; sun)	晚霞 (*wǎn-xiá*; sunset-glow)	灯塔 (*dēng-tǎ*; light-house)	朝日 (*zhāo-rì*; morning-sun)	明月 (*míng-yuè*; bright-moon)
Ground	**Source locations**	屋顶 (*wū-dǐng*; roof)	天井 (*tiān-jǐng*; courtyard)	天空 (*tiān-kōng*; sky)	洞口 (*dòng-kǒu*; cave-entry)	山头 (*shān-tóu*; hilltop)
	Path locations	树冠 (*shù-guān*; tree-crown)	落地窗 (*luò-dì-chuāng*; French-window)	帘缝 (*lián-fèng*; curtain-aperture)	窗纱 (*chuāng-shā*; window-screen)	枝叶 (*zhī-yè*; branches-leaves)

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[24] Although the moon does not radiate light itself, it is considered as a Type I light source when moonlight is described. It is assumed that people treat the moon and the sun similarly when describing the radiation of light. The same is true for stars.

Goal locations	阳台 (*yáng-tái*; balcony)	街道 (*jiē-dào*; street)	梯田 (*tī-tián*; terrace)	眼底 (*yǎn-dǐ*; eye-bottom)	湖 (*hú*, lake)
Typa II Radiation Paths					
Figure	盛景 (*shèng-jǐng*; wonderful-scenery)	月亮 (*yuè-liàng*; moon)	光 (*guāng*; light)	倒影 (*dào-yǐng*; reverse-image)	万里晴空 (*wàn-lǐ-qíng-kōng*; boundless-clear-sky)
Agent	玻璃 (*bō-lí*, glass)	虹桥 (*hóng-qiáo*; Hong-Bridge)	倒影 (*dào-yǐng*; reflection)	雪 (*xuě*; snow)	镜子 (*jìng-zi*; mirror)
Source locations	船 (*chuán*; boat)		湖面 (*hú-miàn*; lake-surface)		山脉 (*shān-mài*; mountain-range)
Goal locations	水面 (*shuǐ-miàn*; water-surface)	湖 (*hú*, lake)	鱼塘 (*yú-táng*; fish-pond)	行人 (*xíng-rén*; pedestrian)	河底 (*hé-dǐ*; river-bottom)

There are only four types of participants involved in Type II radiation path expressions, namely, the Figure, the Agent, the Source location, and the Goal location. The general situation that Type II radiation paths delineate is either that some object projects its image onto some surface that has excellent reflection ability, such as the water surface and the glass; or that the surface with excellent reflection ability reflects out light. The Figure in Type II radiation paths is either the light rays reflected by some reflector (the light source), or the light source (which reflects light), or the image of an entity, as illustrated in the sentences in (4-36), (4-37), and (4-38) respectively. In (4-36), the light reflected by the mirror is conceptualized as moving; in (4-37), the moon, which reflects its light into the river, is conceptualized as falling into the river as its image is visible on the water; in (4-38), the image of the mountain peaks is described as moving into the water.

(4-36) 阴暗的屋子角落里，一面镜子**反射出**暗淡的**光**。

yīn-àn-de	wū-zi	jiǎo-luò	lǐ,	yí-miàn	jìng-zi	**fǎn-shè-chū**
dark	room	corner	in	one-CL	mirror	**reflect-out**

àn-dàn-de	**guāng**.
dim	**light**

In the corner of the dark room, a mirror reflects dim light.

(4-37) 月光在河水上边并不像在海水上边闪着一片一片的金光，而是**月亮落到**河底里
去了。

yuè-guāng	zài-hé-shuǐ-shàng-biān	bìng-bú-xiàng	zài-hǎi-shuǐ-shàng-biān
moonlight	ZAI-river-on	not-like	ZAI-sea-on

shǎn-zhe	yí-piàn-yí-piàn-de	jīn-guāng,	ér-shì	**yuè-liàng**	**luò-dào**
flash-DUR	one-CL-one-CL	golden-ray	but	**moon**	**fall-to**

hé-dǐ-lǐ	**qù**	le.
river-bottom-in	**go**	CRS

The situation when the moonlight is above the river is different from when it is above
the sea. (When it is above the sea, the sea) is flashing with golden rays. (When it is
above the river,) the moon falls into the river bottom.

(4-38) 群峰**倒影入**水中。

qún-fēng	**dào-yǐng**	**rù**	shuǐ	zhōng.
mountain-peaks	**reverse-image**	**enter**	water	in

The image of the mountain peaks enters the water in reverse.

The Agent in Type II radiation paths are varied as illustrated in the sentences from (4-39) to
(4-42). In (4-39), the colorful houses become a reflector that reflects the light rays onto the
pedestrians. The houses change the propagation direction of the light and thus are
conceptualized as the Agent. In (4-40), the entity whose image is shown in a mirror-like
surface is conceptualized as the Agent. Sentence (4-41) conceptualizes the image of an entity
in the lake as the Agent through describing it as possessing the ability to take the scenery into
the lake. In (4-42), the mirror-like entity on which the image is formed is conceptualized as
the Agent that shoots the scenery into itself.

(4-39) 漆着叶绿色、杏仁红、橘子色的**房屋，把**照在它们上面的阳光**反射到**经过它们
面前的行人身上。

qī-zhe	yè-lǜ-sè,	xìng-rén-hóng,	jú-zi-sè-de	**fáng-wū,**
paint-DUR	green-	almond-red	orange-NOM	**house**

bǎ	zhào	zài-tā-men-shàng-miàn-de	yáng-guāng	**fǎn-shè-dào**
BA	shine	ZAI-them-on-NOM	sunshine	**reflect-to**

jīng-guò-tā-men-miàn-qián-de	xíng-rén	shēn-shàng.
pass-their-front-NOM	pedestrians	body-on

The green, almond red, and orange-painted houses reflect the sunlight shined on
them onto the pedestrians passing by.

(4-40) 古雅的**虹桥，把**影儿幽默地**倒绘**在柔碧的水面。

gǔ-yǎ-de	**hóng-qiáo,**	**bǎ**	yǐng-ér	yōu-mò-de	**dào-huì**
quaint	**Hong-Bridge**	**BA**	image	humorously	**reverse-paint**

zài-róu-bì-de-shuǐ-miàn.
ZAI-gentle-water-surface

The quaint Hong Bridge paints its image humorously onto the gentle surface of the water.

(4-41) 那乱真的**倒影**，**把**山庄的胜景都**摄取进**了湖中。

nà luàn-zhēn-de   **dào-yǐng**,   **bǎ**   shān-zhuāng-de
the life-like   **reflection   BA**   mountain-villa-ASSOC

shèng-jǐng   dōu   **shè-qǔ-jìn**-le   hú-zhōng.
wonderful-scenery   all   **take-in**-PFV   lake-in

The life-like reflection takes all the wonderful scenery of the mountain villa into the lake.

(4-42) 辽阔的**澄湖**……不光**把**……胜景都**拢进**了自己的怀抱，且欲**把**山庄外远山上的普乐寺……**邀进**境中。

liáo-kuò-de   **chéng-hú**   bù-guāng   **bǎ**   shèng-jǐng   dōu
wide   **Cheng-Lake**   not-only   **BA**   wonderful-scenery   all

lǒng-jìn-le   zìjǐ-de-huái-bào,   qiě   yù   **bǎ**   shān-zhuāng-wài
gather-in-PFV   own-arms   and   want **BA**   mountain-villa-outside

-yuǎn-shān-shàng-de   pǔ-lè-sì   **yāo-jìn**   jìng-zhōng.
-distant-mountains-on-NOM   Pule-Temple   **invite-into**   mirror-in

The wide Cheng Lake not only gathers all the wonderful scenery into its arms, but also wants to invite Pule Temple on the distant mountains outside of the mountain villa into the mirror.

The default source of the reflection is the light source (which reflects light), but, similar to Type I radiation paths, only part of the journey the Figure covers gets profiled in some sentences. The sentence in (4-43) is such an example that conceptualizes the image of the speaker as moving from the boat into the sea.

(4-43) 回头看见我的背影，**从**船上**投射**海中，眼光跟了它过去，在无尽远处，窥见……圆月。

huí-tóu   kàn-jiàn   wǒ-de   bèi-yǐng,   **cóng** chuán-shàng   **tóu-shè**
turn-back   see   my   image   **from** boat-on   **project**

hǎi-zhōng,   yǎn-guāng   gēn-le   tā   guò-qù,   zài-wú-jìn-yuǎn-chù,
sea-in   eyesight   follow-PFV   it   over   ZAI-endless-distance

kuī-jiàn   yuán-yuè.
see   full-moon

(When I) turned back I saw my image projecting from the boat into the sea. My eyes followed it, and in the endless distance I saw the full moon.

The Goal location is the place onto which the reflected light reaches. Compared with Type I radiation paths, the moving light in Type II radiation paths is too weak and imperceptible to be encoded linguistically. It is probably due to the same reason that the Path location is seldom encoded.

4.2.2 Verbs in radiation paths

A list of representative verbs employed in radiation paths is shown in Table 4.5. Generally speaking, there are three types of verbs used in radiation paths, i.e., general motion verbs, path verbs, and manner verbs. Manner verbs are further categorized into default verbs, force verbs, liquid verbs, animal verbs, coverage verbs, and miscellany verbs.

Table 4.5 Examples of verbs in radiation path expressions

general motion verbs (0.8%)		停留 (*t ńg-li ú*, stay)		铺 (*pū*; spread)		铺展 (*pū-zhǎn*; spread-out)
path verbs (24.6%)		透 (*t òu*; penetrate)	穿 (*chuān*; cross)	过来 (*guò-lái*; come-over)		下 (*xi à*, descend)
		越 (*yu è*, cross)	落 (*lu ò*, drop)	掉 (*di ào*; fall)		进 (*j ìn*; enter)
manner verbs (74.7%)	default verbs (41.4%)	照射 (*zh ào-sh è*, radiate)	照 (*zh ào*; shine)	发 (*fā*; emit)		打 (*dǎ*; strike)
	force verbs (7.5%)	刺 (*c ì*, stab)	投 (*t óu*; cast)	切 (*qiē*; cut)		挤 (*j ǐ*; squeeze)
	liquid verbs (15.5%)	洒 (*sǎ*; spill)	流淌 (*li ú-tǎng*; flow)	泻 (*xi è*, pour)		涌 (*yǒng*; gush)
	animal verbs (3.5%)	触摸 (*ch ù-mō*; touch)	爬 (*p á*, climb)	望 (*w àng*; look)		倦倚 (*ju àn-yǐ*; tired-stay; lean)
	coverage verbs (2.0%)	涂抹 (*t ú-mǒ*; paint)	覆盖 (*f ù-g ài*; cover)	披 (*pī*; wrap)		笼 (*l óng*; envolop)
	miscellany (4.8%)	漏 (*l òu*; leak)	飘 (*piāo*; float-in-the-air)	堆积 (*duī-jī*; accumulate)		撒 (*sǎ*; spill)

Verbs that designate movement but do not specify either path or manner information are identified as general motion verbs. The verb 铺展 (*pū-zhǎn*; spread-out) in the sentence in (4-44) is a verb encoding general motion information. It is followed by an adpositional phrase that specifies the location of the motion.

(4-44) 金色的阳光正分明，**铺展在**屋宇路**旁**。

jīn-sè-de yáng-guāng zhèng fēn-míng, **pū-zhǎn zài**-wū-yǔ-lù-**páng**.
golden sunshine right bright **spread-out ZAI**-Wuyu-Road-**side**

The golden sunshine is very bright, and it spreads out on both sides of Wuyu Road.

There are 98 instances of path verbs accounting for 24.6% of all the verbs employed in radiation paths. For radiation paths described with path verbs, little manner information is involved, as demonstrated by the sentences from (4-45) to (4-47).

(4-45) 翻过泥巴山……期待已久的阳光如约**下来**。

fān-guò níbā-shān… qī-dài-yǐ-jiǔ-de yáng-guāng rú-yuē
cross-over Niba-Hill long-anticipated sunshine as-expected

xià-lái.
descend-come

(After we) crossed over Niba Hill, the long-anticipated sunshine came down as expected.

(4-46) 到达山顶时，正好赶上了从山脊后**升起**的第一缕阳光。

dào-dá shān-dǐng shí zhèng-hǎo-gǎn-shàng-le **cóng**-shān-jǐ-hòu
arrive mountain-top when happen-to **from-**ridge-back

shēng-qǐ-de dìyīlǚ yáng-guāng.
rise-up-NOM first-CL sunshine

When arriving at the mountaintop, (we) happened to see the first beam of rays that rose up from the ridge.

(4-47) 月光淡淡的斜着**来**。

yuè-guāng dàn-dàn-de xié-zhe **lái**.
moonlight dimly obliquely **come**

The dim moonlight comes obliquely.

Among the radiation paths described with manner verbs, a large percentage of them are described with default verbs, which are verbs specifically used for describing light. These default verbs usually co-occur with other directional elements expressing some fictive motion sense. Examples from (4-48) to (4-50) illustrate fictive motion expressions with default verbs and other dynamic elements, including directional adpositions and directional verb complements.

(4-48) 从上而下的阳光和**从湖面反射上来**的光线都**照到**这片斜坡上。

cóng-shàng-ér-xià-de yáng-guāng hé **cóng**-hú-miàn-**fǎn-shè**-
from-above-down-NOM sunshine and **from-**lake-surface-**reflect-**

shàng-lái-de guāng-xiàn dōu **zhào-dào** zhè-piàn xié-pō-shàng.

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up-come-NOM   light-rays   both   **shine-to**   this-CL   slope-on

The sunshine (travelling) from above and the light rays reflected from the lake surface shine onto the slope.

(4-49) 他飞快稳健地驾驶……偶尔灯光**晃进**车内。

tā	fēi-kuài	wěn-jiàn-de	jià-shǐ…	ǒu-ěr	dēng-guāng
he	fast	smoothly	drive	occasionally	light-rays

huàng-jìn   chē-nèi
flash-into   car-in

He drove in a fast but smooth way, (and) light rays occasionally flashed into the car.

(4-50) 淡淡的太阳**从**密树枝头一丝一丝的**射入**。

dàn-dàn-de	tài-yáng	**cóng**	mìshù-zhī-tóu	yìsī-yìsī-de
faint	sun	**from**	thick-forest-branch	one-ray-after-another

shè-rù
radiate-in

The faint (light of the) sun radiates in through the branches of the thick forest.

For the above sentences, the verbs 反射 (*fǎn-shè*, reflect) and 照 (*zhào*; shine) in (4-48), 晃 (*huàng*; flash) in (4-49), and 射 (*shè*, radiate) in (4-50) are all orthodox verbs modifying light. It is probably individually different whether these default verbs involve any motion sense, but the verb complements 上来 (*shàng-lái*; up-come) and 到 (*dào*; to) in (4-48), 进 (*jìn*; into) in (4-49), and 入 (*rù*, in) in (4-50) following the verbs are directional elements indicating the displacement of some entity. Also, the directional prepositional phrase 从 (*cóng…*; from…) in both (4-48) and (4-50) before the corresponding verbs suggests the departure of the displacement. Radiation path expressions featuring default verbs exhibit lower degree of fictive motion sense compared with those with other types of verbs.

The force verbs, liquid verbs, and animal verbs will be talked about below in terms of metaphors. Miscellany verbs are verbs occurring less frequently and are difficult to group. Coverage verbs share the commonality that they are used to depict the scenario where the light rays arrive at some object and interact with the object in the manner of covering it, but there are no established image schemas or metaphoric mappings about this coverage pattern.

4.2.3 Metaphors in radiation paths

Describing light in terms of motion indicates that, generally speaking, light is conceptualized as something in motion. A detailed investigation of radiation path expressions reveals that

several more specific domains associated with the domain of motion are frequently employed to describe light. There are three specific conceptual metaphors motivating the use of manner verbs and other dynamic elements in radiation path expressions. They are LIGHT IS LIQUID, LIGHT IS AN ANIMAL, and LIGHT IS A SWORD-LIKE THING.

The metaphoric mapping LIGHT IS LIQUID has been identified in Thai (Takahashi, 2000) and English (Kemmer, 2014). The following set of sentences from (4-51) to (4-53) instantiate the metaphor LIGHT IS LIQUID in Chinese. In those sentences, the manner verbs employed to describe the fictive motion of light rays are verbs usually used for the description of how the liquid moves.

(4-51) 夕阳似乎毫无遮掩地**倾洒**在餐厅窗前的甲板上。

    xī-yáng   sìhū   háo-wú-zhē-yǎn-de   **qīng-sǎ**
    setting-sun   seemingly   with-no-obstacle   **pour**

    zài-cān-tīng-chuāng-qián-de-jiǎ-bǎn-shàng.
    ZAI-restaurant-window-front-ASSOC-deck-on

    The setting sun seems to pour (light rays) onto the deck in front of the window of the restaurant without any obstacle.

In the sentence in (4-51), the setting sun is metonymically used here to refer to the light rays of the setting sun, and it is conceptualized as a large amount of liquid pouring down on the deck.

(4-52) 月光从东墙肩上斜**泻下去**，笼住她的全身。

    yuè-guāng   cóng   dōng-qiáng-jiān-shàng   xié   **xiè-xià-qù,**
    moonlight   from   east-wall-shoulder-on   obliquely   **shed-down-go**

    lóng-zhù   tā-de   quán-shēn.
    cover   her   whole-body

    The moonlight poured down obliquely from the east wall (and) covered her.

The moonlight is firstly conceptualized as some liquid rushing down from the wall and then covering the person. It can be seen from the use of the manner verb 泻 (*xiè*, shed) that the sentence in (4-52) describes the moonlight as liquid that rushes down.

(4-53) 水一般透彻的阳光自洞口**流淌进来**。

    shuǐ-yìbān   tòu-chè-de   yáng-guāng   **zì**   dòng-kǒu   **liú-tǎng-jìn-lái.**
    water-like   limpid   sunshine   **from**   cave-entrance   **flow-in-come**

    The sunshine, which is as limpid as water, flows in from the entrance of the cave.

In sentence (4-53), the sunlight is compared to water explicitly, which can flow from somewhere.

The following three sentences from (4-54) to (4-56) illustrate the metaphor LIGHT IS AN ANIMAL. Verbs prototypically depicting the movement of an animal are employed here to describe the fictive movement of light. In (4-54), the moonlight is conceptualized as an animal bowing down. In (4-55), the unstable bright area on the road due to the projection of the sunshine is described as the jumping motion of an animal. In (4-56), the changing of the bright area is linguistically conceptualized as the moving of the moonlight, which crossed the strait and climbed up the mountain peaks. This scenario is similar to what Talmy defined as *pattern paths* (discussed in the next chapter) in that the changing of the bright area is caused by the changing position of the moon. Linguistically, the changing of the bright area is represented by the fictive movement of the moonlight, where the moonlight is depicted as an animal.

(4-54) 月光**从**云端里**轻俯下来**。

  yuè-guāng   **cóng** yún-duān-lǐ   **qīng-fǔ-xià-lái**.
  moonlight   **from** clouds-in   **gently-bow-down-come**

  The moonlight bows down gently from the clouds.

(4-55) 阳光星星点点在一条石子路上**跳耀**。

  yáng-guāng   xīng-xīng-diǎn-diǎn   zài-yì-tiáo-shízǐ-lù-shàng   **tiào-yào**.
  sunshine   dots-of   ZAI-a-CL-gravel-road-on   **jump**

  Dots of sunshine jump on the gravel road.

(4-56) 月光**渡过**了爱尔兰海峡，**爬上**海尔佛林的高峰，正对着静默的红潭。

  yuè-guāng   **dù-guò**-le ài-ěr-lán-hǎi-xiá, **pá-shàng**   hǎi-ěr-fó-lín-de
  moonlight   **cross**-PFV Irish-Channel   **climb**   Haier-Flynn-ASSOC

  gāo-fēng,   zhèng   duìzhe   jìng-mò-de hóng-tán.
  high-peak   right   face-DUR silent   red-pond

  The moonlight crossed the Irish Channel, climbed the high peaks of Haier Flynn, (and) is facing the silent red pond.

Sentences from (4-57) to (4-59) are structured by the metaphor LIGHT IS A SWORD-LIKE THING. Verbs in these sentences depict the light rays as a sharp object moving with force.

(4-57) 这时，一片透亮的水光**刺到**了我的双眼。

  zhè-shí   yí-piàn   tòu-liàng-de   shuǐ-guāng   **cì-dào**-le   wǒ-de
  then   one-CL   bright   water-light   **stab-to**-PFV my

  shuāng-yǎn.

two-eyes

Then, a piece of water light stabbed into my eyes.

(4-58) 晨光**划破**层云直指雪山之巅。

ch én-guāng **hu á-p ò** c éng-y ún zh í zhǐ
morning-rays **cut-apart** layers-of-cloud directly-point

xuě-shān-zhī-diān.
snow-mountain-ASSOC-peak

Morning rays cut layers of clouds apart (and) point directly to the peak of the snow mountain.

(4-59) 天色浓黑，凯伦车上**射**出的灯光像两把白亮的匕首那样**切开**黑暗。

tiān-s è n óng-hēi, kǎi-l ún-chē-sh àng-**sh è**-chū-de dēng-guāng
sky thick-black Karen-Car-on-**shoot**-out-NOM light

xi àng liǎng-bǎ b ái-li àng-de bǐ-shǒu-n à-y àng **qiē-kāi** hēi- àn.
like two-CL white-bright dagger **cut-open** darkness

In the dark night, the light rays shot from the Karen Car cut the darkness apart like two bright white daggers.

4.3 Shadow Paths

Shadow paths pertain to the linguistic description that "the shadow of some object visible on some surface has fictively moved from that object to that surface" (Talmy, 2000a, p. 114). There are 47 examples involving shadow paths from the data. It is observed that shadow paths in Chinese are not all conceptualized as being from the shadow-bearing object to the shadow, but also from the light source to the shadow. It is not surprising that in some cases the light-related entities (the light source and light rays) are expressed saliently since a shadow is formed due to the contrast of a bright area where the light rays strike and a dark area where no or fewer light rays are present. Shadow paths are analysed with regard to two aspects, namely, the participants (Section 4.3.1) and the verbs (Section 4.3.2) involved. Due to the low number of sentences collected, it is inappropriate to analyse them in terms of conceptual metaphors.

4.3.1 Participants in shadow paths

Table 4.6 below lists the main participants in shadow paths, including the Figure, the Agent, and the Ground that is grouped further into the Path location and the Goal location. What is conceptualized as undergoing displacement in shadow paths is the shadow, as can be seen in all the examples in the discussion of shadow paths. The Agent is either the shadow-bearing

object or the light-related entities (i.e., light source or light rays) that are conceptualized as controlling the shadow. The sentences in (4-60) and (4-61) illustrate the agentive role played by the shadow-bearing object and the light rays respectively. In (4-60), the furnaces (the shadow-bearing object) are described as the Agent that drags the shadows long; in (4-61), the moonlight is conceptualized as projecting the shadow onto some Goal location. Notice that both the two sentences use the *bǎ* construction (as introduced in Section 2.3.2), in which the shadow-bearing object and the light rays are encoded in the noun phrase before *bǎ* and the shadow is encoded in the noun phrase after *bǎ*, indicating that the shadow is at the disposal of the shadow-bearing object and the light rays.

(4-60) 阳光斜**射**过来的时候，那些林立的**窑炉**把影子**拉**得修长。

yáng-guāng-xié-**shè**-guò-lái-de　　shí-hòu,　　nà-xiē　　lín-lì-de
sunshine-obliquely-**shoot**-over-NOM　when　　　those　　　bristly

yáo-lú　**bǎ**　yǐng-zi　**lā-de**　　　　　xiū-cháng.
furnace BA　shadow　**drag-CSC**　　　long

When the sunshine shoots over obliquely, those bristly furnaces drag their long shadows out.

(4-61) 黑黑的，孤零零的，看**月光**怎样**把**我的身影**安置到雪地**里去。

hēi-hēi-de,　　gū-líng-líng-de,　kàn　**yuè-guāng**　zěn-yàng　**bǎ**
black　　　　lonely　　　　see　**moonlight**　how　　　**BA**

wǒ-de　shēn-yǐng　**ān-zhì-dào**　　**xuě-dì**　lǐ　**qù**.
mine　shadow　**find-a-place-for-to**　**snow-field** in　**go**

(The night) is black and lonely, (and I) want to see how the moonlight places my shadow onto the snow field.

Path locations are encoded in the situation where the interaction is between a light-related entity and the shadow, in which the light rays go through the Path location (which is usually the shadow-bearing object) and project the shadow onto the Goal location. In the sentence in (4-62), the crown of the cypress is encoded as the Path location through which the sunshine travels, and it is also the object whose shadow is projected by the sunshine.

(4-62) 阳光**透过**松柏的树冠**投下**碎影。

yáng-guāng　**tòu-guò**　sōng-bǎi-de　shù-guān　**tóu-xià**
sunshine　　**through**　cypress-ASSOC　crown　　**project-down**

suì-yǐng.
broken-shadow

The sunshine projects a broken shadow through the crown of the cypress.

The Goal location is the place where the shadow arrives at finally. It is encoded in the sentence in (4-61) (雪地 [*xuě-dì* snow-field]) and absent in the sentences in (4-60) and (4-62). No Source location is encoded in shadow path expressions.

Table 4.6 Examples of participants in shadow path expressions

Figure		身影 (*shēn-yǐng*; body-shadow)	影子 (*yǐng-zi*; shadow)	树影 (*shù-yǐng*; tree-shadow)	阴凉 (*yīn-liáng*; shade)	光斑 (*guāng-bān*; light-spot)	轻纱 (*qīng-shā*; fine-gauze)
Agent		月光 (*yuè-guāng*; moonlight)	白云 (*bái-yún*; clouds)	太阳 (*tài-yáng*; sun)	火光 (*huǒ-guāng*; flame)	园墙 (*yuán-qiáng*; garden-wall)	灌木 (*guàn-mù*, shrub)
Ground	Path locations	树冠 (*shù-guān*; tree-crown)		树叶 (*shù-yè*, leaf)		薄云 (*bó-yún*; thin-cloud)	
	Goal locations	雪地 (*xuě-dì*; snowfield)	墙 (*qiáng*; wall)	白幕 (*bái-mù*, white-screen)	地面 (*dì-miàn*; ground)	山坡 (*shān-pō*; hillside)	巷子 (*xiàng-zi*; alley)

Talmy (2000a, p. 117) elaborates the active-determinative principle with the case of shadow paths in the way that the shadow-bearing object is more determinative than the shadow because of the stability of the existence of the object in darkness and the observation that the movement of the object controls the movement of its shadow but not vice versa. The situation needs to be elaborated further when a third participant occurs in a shadow path expression. It is often the case that a light-related entity is involved in a shadow path since it is indispensable in the generating of a shadow. How is the active-determinacy level arranged with the light-related entity, the shadow-bearing object, and the shadow? For the collected examples, usually the interaction is either between the shadow-bearing object and the shadow or between the light-related entity and the shadow, as illustrated in (4-60) and (4-61) above which both employ the *bǎ* construction. In other sentence patterns other than *bǎ* constructions when two participants are involved, it is also the case that the one endowed with animate features is not the shadow, but the light-related entity or the shadow-bearing object as shown in (4-63) and (4-64) respectively. The shadow is conceptualized as the animate entity only when no other participant is present, as illustrated in the sentence in (4-65). Thus it can be concluded that the shadow is at the lowest end of the active-determinacy level.

(4-63) 夕阳投下一个长长的身影，贴墙穿过旧门。

xī-yáng **tóu-xià** yī-gè chǎng-chǎng-de shēn-yǐng,
setting-sun **project-down** one-CL long body-shadow

tiē qiáng chuān-guò jiù-mén.
along wall go-through old-door

The setting sun projects a long shadow (of someone), which goes through the old door along the wall.

(4-64) 此刻听不见风的奏鸣……只有飞机投下的孤独影子。

cǐ-kè tīng-bú-jiàn fēng-de zòu-míng… zhǐ-yǒu **fēi-jī**
this-moment hear-not wind-ASSOC sound only-have **plane**

tóu-xià-de gū-dú yǐng-zi.
project-down-NOM lonely shadow

(You) cannot hear the sound of the wind at this moment. There is only the lonely shadow projected by the plane.

(4-65) 浓郁的树影投在纱窗上。

nóng-yù-de **shù-yǐng** **tóu** zài-shā-chuāng-shàng.
thick **tree-shadow** **project** ZAI-screen-window-on

The thick shadow of the trees projects onto the screen window.

It is difficult to conclude whether the light is more determinative or the shadow-bearing object since usually they do not interact directly in shadow path expressions. Shadow path sentences explicitly expressing both the shadow-bearing object and the light-related entities either encode the light-related entities in the adverbial phrase providing the general weather condition before the main clause where the shadow-bearing object interacts with the shadow, as shown in example (4-60); or encode the shadow-bearing object as the attributive of the shadow when the interaction is between the light and the shadow, as in example (4-61). As shown in (4-62), there is one case where both the shadow-bearing object and the light-related entity are involved in the fictive motion, i.e., the shadow-bearing object is encoded as the Path location of the light rays, but this interaction is more of a radiation path than a shadow path. On the other hand, it can also be argued that the light and the shadow-bearing object are equally active-determinative in that neither of them is in the position to control the other.

4.3.2 Verbs in shadow paths

Probably due to the close relation to radiation paths, shadow paths employ similar types of verbs, though the percentages of each type are different. Table 4.7 below illustrates the verbs depicting shadow paths.

Table 4.7　Examples of verbs in shadow path expressions

general motion verbs (2.1%)		铺 (*pū*; spread)			
path verbs (8.3%)		落 (*luò*, fall)	垂 (*chuí*, droop)	到 (*dào*; arrive-at)	透过 (*tòu-guò*, pass-through)
manner verbs (89.6%)	**radiation verbs (12.5%)**	反射 (*fǎn-shè*, radiate)	映射 (*yìng-shè*, project)	映 (*yìng*; project)	照 (*zhào*; shine)
	liquid verbs (6.3%)	洒 (*sǎ*; shed)			
	force verbs (54.2%)	投 (*tóu*; cast)	切 (*qiē*; cut)	投射 (*tóu-shè*, project)	
	animal verbs (10.4%)	安置 (*ān-zhì*, find-a-place-for)	写 (*xiě*; write)	印 (*yìn*; print)	
	miscellany (6.3%)	拖 (*tuō*; drag)	漏 (*lòu*; leak)	筛 (*shāi*; sift)	

One general motion verb 铺 (*pū*; spread) is identified, and the sentence containing it is exemplified in (4-66). In this sentence, the directional verb complement 到 (*dào*; to) is used to specify the direction of the fictive movement.

(4-66)　芭蕉的叶子大得惊人……影子**铺到**地上，浓黑一团。

　　　　bā-jiāo　de　　　　yè-zi dà-de　　jīng-rén… yǐng-zi　**pū-dào**
　　　　plantain ASSOC　　leaf big-CSC　amazingly shadow　**spread-to**

　　　　dì-shàng,　　　nóng-hēi　　　yī-tuán.
　　　　ground-on　　intense-black　one-CL

　　　　The leaves of the plantain trees are amazingly big. Their shadow spreads across the ground and (forms a big) intense black (area).

Pure path verbs do not occur a lot in shadow path expressions (probably due to the restriction on the moving direction of the shadow). Four types of path verbs are identified, as listed in the above table, among which 到 (*dào*; arrive-at) encodes the arrival Vector of the movement undergone by the shadow; 透过 (*tòu-guò*, pass-through) is employed to describe the movement of light rays rather than the shadow; and 落 (*luò*, drop) and 垂 (*chuí*, droop)

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specify the downward movement on the part of the shadow. The sentences in (4-67) and (4-68) illustrate the employment of 落 (luò, drop) and 垂 (chuí, droop) respectively.

(4-67) 月光是隔了树照过来的，高处丛生的灌木，**落下**参差的斑驳的黑影。

yuè-guāng	shì	géle	shù	zhào-guò-lái-de,	gāo-chù-cóng-shēng-de
moonlight	is	through	tree	shine-over	dense

guàn-mù,	**luò-xià**	cēn-cī-de	bān-bó-de	hēi-yǐng.
tree	**drop-down**	sparse	graceful	balck-shadow

The moonlight shines through the trees, and the dense trees drop their black shadow down in a sparse and graceful manner.

(4-68) 忽而它（太阳）又躲进云里，透过薄云**垂下**一匹轻纱。

hū-ér	tā (tài-yáng)	yòu	duǒ-jìn-yún-lǐ,	tòu-guò	bó-yún
suddenly	it (sun)	again	hide-into-cloud-in	pass	thin-cloud

chuí-xià	yì-pǐ	qīng-shā.
hang-down	one-CL	light-silk

Suddenly it (the sun) hides in the clouds again, passes through the thin clouds, and hangs down light silk (the shadow of the clouds).

The use of radiation verbs indicates the close relation between light and shadow and also between radiation paths and shadow paths. Similar to radiation path expressions, the dynamic sense in this case resides more in the dynamic adpositional phrases than in the verbs. The sentence in (4-69) illustrates the case employing a radiation verb, in which the adpositional phrase together with the verb conveys the fictive motion sense.

(4-69) 太阳升起之后，树林的影子**映射在**雪道上。

tài-yáng	shēng-qǐ	zhī-hòu,	shù-lín-de	yǐng-zi
sun	rise	after	trees-ASSOC	shadow

yìng-shè	**zài**-xuě-dào-**shàng**.
project	**ZAI**-snow-trail-**on**

After the sun rises, the shadow of the trees projects onto the snow trail.

It is possible for the shadow to be conceptualized as some liquid shedding down in certain situations but the percentage is not high. In the sentence in (4-70), the shadow is conceptualized as some liquid shedding down onto the ground.

(4-70) 院中有两颗参天的老柏树，浓荫**洒**满一地。

yuàn-zhōng	yǒu	liǎng-kē	cān-tiān-de	lǎo	bǎi-shù,
courtyard-in	have	two-CL	tall	old	cypress

nóng-yīn	**sǎ**-mǎn	yí-dì.

thick-shadow **spray**-full one-ground

There are two old tall cypresses in the courtyard, and their thick shadow sprays all over the ground.

The most prominent type of manner verbs (and verbs) employed in shadow paths is force verbs, accounting for more than half of all the examples. In shadow path expressions with a force verb, the participant involved can either be merely the Figure, as in (4-71); or involve the light-related entity or the shadow-bearing object as the Agent, as in (4-72) and (4-73) respectively. The shadow in the latter case is conceptualized as an entity with some weight onto which the Agent exerts some force.

(4-71) 浓郁的**树影投在**纱窗上。

nóng-yù-de	**shù-yǐng**	**tóu**	**zài**-shā-chuāng-**shàng**.
thick	**tree-shadow**	**project**	**ZAI**-window-screen-**on**

The thick shadow of the trees projects onto the window screen.

(4-72) 他看到的自以为真的世界，其实只是影子，是后面的**火光把**舞台上活动的人和物的影子**投射到**了洞壁上。

tā kàn-dào-de	zì-yǐ-wéi-zhēn-de	shì-jiè,	qí-shí	zhǐ	shì
he see-NOM	think-true-NOM	world	actually	only	is

yǐng-zi, shì	hòu-miàn-de	**huǒ-guāng bǎ**	wǔ-tái-shàng	huó-dòng-de
shadow is	back	**flame** **BA**	stage-on	moving

rén-hé-wù-de		yǐng-zi	**tóu-shè-dào**-le
people-and-object-ASSOC		shadow	**project-to**-PFV

dòng-bì	**shàng**.
cave-wall	**on**

The world he saw and thought to be true is just shadow. It is the flame in the back that projects the shadow of the people and objects on the stage onto the wall of the cave.

(4-73) **园墙**在金晃晃的空气中**斜切下**一溜荫凉。

yuán-qiáng	zài-jīn-huǎng-huǎng-de-kōng-qì-zhōng	**xié-qiē-xià**
garden-wall	ZAI-golden-air-in	**oblique-cut-down**

yì-liū	yīn-liáng.
one-CL	shade

The wall of the garden cuts an area of shade in the golden air.

In examples using an animal verb such as (4-74), the Agent (either the light-related entity or the shadow-bearing object) is conceptualized as an animal (most possibly human beings) that is in the position to dispose the shadow.

(4-74) 两岸的枯树，都**把**自己淡黑的长影子**写在**银灰色的土地上。

> liǎng-àn-de   kū-shù,   dōu **bǎ**   zì-jǐ dàn-hēi-de
> two-bank-ASSOC   deadwood   all   **BA**   its   light-black
>
> cháng   yǐng-zi   **xiě**   **zài**-yín-huī-sè-de-tǔ-dì-**shàng**.
> long   shadow   **write**   **ZAI**-silver-grey-ground-**on**
>
> The deadwood along the banks writes its light black shadow onto the silver grey ground.

In radiation paths, the entities conceptualized as fictively moving are the light rays, and in shadow paths, the fictively moving entity is the shadow. However, the light rays in radiation paths are in some cases conceptualized as an Agent-like entity that moves voluntarily, whereas the shadow in shadow paths is usually the controlled one that moves passively due to another Agent-like entity.

4.4 Sensory Paths

A sensory path "involves the conceptualization of two entities, the Experiencer and the Experienced, and of something intangible moving in a straight path between the two entities in one direction or the other" (Talmy, 2000a, p. 115). In contrast to other emanation paths, the source of emanation in sensory paths has two candidates, namely, the Experiencer and the Experienced. In an "Experiencer as Source" sensory path, the Experiencer sends out a fictive entity that moves towards the Experienced; in an "Experienced as Source" sensory path, a fictive entity is emitted by the Experienced and moves to the Experiencer (ibid). Based on the collected fictive motion sentences, sensory paths involve the fictive motion either between an explicit Experiencer and an explicit Experienced in most cases, or occasionally solely on the part of the Experiencer or the Experienced with the other participant absent linguistically.

The modality of sensory experience described with fictive motion expressions can be visual, auditory, olfactory, or even tactile and gustatory. I focus on sensory path expressions structuring our visual, auditory and olfactory experience since tactile and gustatory paths rarely occur. The description of sensory path expressions in Chinese begins with visual path sentences.

4.4.1 Visual paths

Visual path expressions pertain to visually perceptual events such that a person (the Experiencer) conducts the action of looking and sees some entity (the Experienced). The

linguistic features of visual path sentences are described in the following subsections in terms of the participants (Section 4.4.1.1), the verbs delineating relationships between different participants (Section 4.4.1.2) and their relation with the direction of fictive motion (Section 4.4.1.3), and possible metaphors (Section 4.4.1.4).

4.4.1.1 *Participants in visual paths*

As illustrated in Table 4.8, participants in visual paths generally include the Figure, the Ground, and the Agent. The Agent usually occurs in sentences featuring *bǎ* constructions. Since the direction of the fictive motion in sensory paths can be either from the Experienced to the Experiencer or vice versa (I will use "bidirectional" or "bidirectionality" to refer to the possibility of the two directions of sensory paths[25]), the Figure encompasses two types of entities, i.e., the Experiencer and the Experienced. When the Experiencer functions as the Figure, the fictive movement is made by some fictive entity associated with the eyes that moves from the Experiencer to the Experienced; in contrast, when the Experienced plays the role of the Figure, what is conceptualized as fictively moving are entities perceived by the eyes and the fictive motion is from the Experienced to the Experiencer. Accordingly, the entities functioning as the Goal location are either the Experienced or the Experiencer depending on the direction of the visual path. The sentences in (4-75) and (4-76) illustrate different roles played by the Experiencer and the Experienced and the corresponding direction of the fictive motion. In the sentence in (4-75), the ancient kilns are conceptualized as bumping into the eyes, which are the perceiving organ of the Experiencer. In this instance, the Experienced serves as the Figure while the Experiencer serves as the Goal location, and the fictive motion goes from the Experienced to the Experiencer. In the sentence in (4-76), the lines of sight of the Experiencer are described as extending towards the perceived entities, which are the Experienced. In this sentence, the Figure is associated with the Experiencer and the Goal location is the Experienced.

(4-75) 忽然，路旁一座座庞大坚实的**古窑撞入眼帘**。

hū-rán,	lù-páng	yízuò-zuò	páng-dà-jiān-shí-de	**gǔ-yáo**
suddenly	roadside	one-CL-CL	large	**ancient-kilns**

zhuàng-rù	**yǎn-lián**.
bump-into	**eye-curtain**

Suddenly, ancient large kilns along the roadside ran into my eyes.

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[25] "Bidirectionality" and "bidirectional" do not mean that fictive movement in both directions is happening simultaneously. They just mean that both directions are possible for the fictive movement.

(4-76) 在淡淡的牛油香气之中，我们的**目光向牧场，向碧湖，向青山，**贪婪地**伸展而去。**

zǎi-dàn-dàn-de-niú-yóu-xiāng-qì zhī-zhōng, wǒ-men-de   **mù-guāng xiàng**
ZAI-light-butter-scent-in   our   **eye-light   towards**

mù-chǎng,   xiàng   bì hú,   xiàng   qīng-shān, tān-lán-de
meadow   towards   lake   towards   mountain greedily

shēn-zhǎn   ér   qù.
extending   in-the-manner-of   go

With the light scent of butter, our line of sight extends greedily towards the meadow, the lake, and the mountain.

Table 4.8 Examples of participants in visual path expressions

Figure							
Figure	**Experiencer**	目光 (*mù-guāng*; eye-light; line-of-sight)	视线 (*shì-xiàn*; vision-line; line-of-sight)	眼光 (*yǎn-guāng*; eye-light; gaze)	目 (*mù*; eye)	视野 (*shìyě*; vision-field)
	Experienced	风景 (*fēng-jǐng*; scenery)	农田 (*nóng-tián*; farmland)	雪山 (*xuě-shān*; snow-mountain)	光 (*guāng*; light)	蓝天 (*lán-tiān*; blue-sky)
Agent		我 (*wǒ*; I)	来访者 (*lái-fǎng-zhě*; visitor)	他们 (*tā-men*; they)	孩子 (*hái-zi*; kid)	犬 (*quǎn*; dog)
Ground	**Source locations**	窗户 (*chuāng-hu*; window)	空中 (*kōng-zhōng*; midair)	门 (*mén*; door)	墙头 (*qiáng-tóu*; wall)	缆车 (*lǎn-chē*; cable-car)
	Path locations	枝叶 (*zhī-yè*; branch-leaf)	树林 (*shù-lín*; wood)	玻璃 (*bō-lí*; glass)	海水 (*hǎi-shuǐ*; sea-water)	雨幕 (*yǔ-mù*; rain-curtain)
	Goal locations **Experiencer**	眼帘 (*yǎn-lián*; eye-curtain)	视野 (*shìyě*; vision-field)	眼睛 (*yǎn-jīng*; eye)	注视 (*zhù-shì*; stare)	眼底 (*yǎn-dǐ*; eye-bottom)
	Experienced	海岸线 (*hǎi-àn-*	青年 (*qīng-*	花圃 (*huā-pǔ*;	天边 (*tiān-*	埃菲尔铁塔

		xiàn; coastline)	nián; young-man)	parterre)	biān; horizon)	(āi-fēi-ěr-tiě-tǎ; Eiffel Tower)
	Direction	南 (nán; south)	下 (xià, down-side)	外 (wài; outside)	对面 (duì miàn; opposite-side)	远方 (yuǎn-fāng; distance)

The Source location is encoded in cases where the location of the Experiencer is specified, as illustrated in the sentence in (4-77). The window in (4-77) is the Source location where the unspecified Experiencer is located and conducts the perceiving action.

(4-77) 由窗户往外望去，空旷的机场、明亮的候机大厅全部尽收眼底。

yóu   chuāng-hu   wǎng-wài wàng-qù, kōng-kuàng-de   jī-chǎng,
from   window   outwards look-go,   empty   airport

míng-liàng-de hòu-jī-dà-tīng   quán-bù   **jìn-shōu-yǎn-dǐ**.
bright   departure-lounge   all   **all-draw-into-eye-bottom**

(If you) look outwards from the window, (you will) have a panoramic view of the empty airport and bright departure lounge.

The Path location is usually the entity between the Experiencer and the Experienced that the Figure passes or crosses. It is encodable for visual paths of both directions. In the sentence in (4-78), the visual path is from the Experiencer to the Experienced, and the fictive motion is carried out by the lines of sight that are conceptualized as crossing the highway. The sentence in (4-79) depicts a picture in which the couple are located in the sea and their facial expression shows through the seawater. In this case the happy expression (the Experienced) of the couple is conceptualized as crossing the water (Path location) and arriving at the unspecified observer (the Experiencer).

(4-78) 视线穿过革命广场边的马路，对面就是剧院广场和剧院。

shì-xiàn   **chuān-guò**   gé-mìng-guǎng-chǎng-biān-de   **mǎ-lù**,
sight-line **cross**   revolution-square-beside-NOM   **highway**

duì-miàn   jiù-shì   jù-yuàn-guǎng-chǎng hé   jù-yuàn.
opposite   is   theatre-square   and theatre

The line of sight crosses the highway beside the Revolution Square, and opposite the highway are the Theatre Square and the theatre.

(4-79) 透过海水，这对新人脸上的喜悦之情纤毫毕现，可见海水透明度之高。

tòu-guò   **hǎi-shuǐ**, zhè-duì   xīn-rén   liǎn-shàng-de

| pass-over | sea-water | this-pair | new-couple | | face-on-NOM |

xǐ-yuè-zhī-qíng　　　xiān-háo-bì-xiàn,　　kě-jiàn　　hǎi-shuǐ
happiness-expression　view-in-detail　　can-see　　sea-water

tòu-míng-dù-zhī-gāo.
transparency-high-degree

The happiness on the faces of the new couple can be viewed in detail through the sea water, which indicates the high degree of transparency of the sea water.

The Direction of the visual path is encoded when the fictive motion is performed by the Experiencer and the Experienced is encoded in another clause, as shown in (4-80). In this sentence, the Direction of the visual path is encoded to specify where the speaker orients his lines of sight.

(4-80)　登上城堡山头**向下望去**，依次是金黄的油菜花田、碧绿的草地、青蓝的湖面。

dēng-shàng　　chéng-bǎo-shān-tóu　**xiàng-xià-wàng-qù**,　yī-cì　　　　shì
climb-up　　　castle-mountain-top　**downwards-look-go**　in-this-order　is

jīn-huáng-de　yóu-cài-huā-tián, bì-lǜ-de　cǎo-dì,　qīng-lán-de　　hú-miàn.
golden　　　　rape-flower-field green　　grassland blue　　　　　lake

(If you) climb up the mountain top at the castle and look downwards, (you can see) in turn the golden rape flower field, the green grassland, and the blue lake.

As mentioned earlier, the Agent is usually encoded in sensory path sentences containing *bǎ* constructions. The sentence in (4-81) below is such an example. In (4-81), the glance is conceptualized as a concrete tangible object at the disposal of Ruan Ji (the Agent). The Agent in effect is the Experiencer who performs the fictive motion, but for sentences with an Agent and a *bǎ* construction, there is usually another entity associated with the eyes serving as the entity under the control of the Agent. This entity associated with the eyes functions either as the Figure, as for *gaze* in (4-81), or as the Goal location, as for *eye* in (4-82). In many cases, the words for the entity associated with the eyes are the result of metaphorical conceptualization, and such cases will be discussed later in Section 4.4.1.4 in detail.

(4-81)　**阮籍**心中一热，终于**把**深褐色的目光浓浓地**投向**这位青年。

ruǎn-jí　xīn-zhōng yī-rè,　　zhōng-yú　**bǎ**　shēn-hè-sè-de　mù-guāng
Ruan Ji heart-in　moved　　　finally　　**BA**　dark-brown　　　gaze

nóng-nóng-de　**tóu-xiàng**　　zhè-wèi　qīng-nián.
affectionately　**cast-towards**　this-CL　young-man

Ruan Ji was moved and finally cast a dark brown gaze towards the young man affectionately.

(4-82)　站在观景台上，**把**上万亩色彩纷呈的梯田**收入眼底**。

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zhàn   zài-guān-jǐng-tái-shàng,   **bǎ**   shàng-wàn-mǔ
stand   ZAI-viewing-deck-on   **BA**   thousands-of-acres

sè-cǎi-fēn-chéng-de tī-tián   **shōu-rù-yǎn-dǐ**.
colourful   terrace   **draw-into-eye-bottom**

The view of the thousands of acres of colourful terrace is drawn into the eyes by (somebody) standing on the viewing deck.

4.4.1.2 Verbs in visual paths

Table 4.9 below illustrates the representative verbs in visual paths that are categorized based on the semantic elements encoded.

Table 4.9   Examples of verbs in visual path expressions

general motion verbs (5.1%)		移 (*yí* move)	伸展 (*shēn-zhǎn*; stretch)	延伸 (*yán-shēn*; extend)	铺陈 (*pū-chén*; spead)	停留 (*tíng-liú*, stay)
path verbs (35.6%)		穿 (*chuān*; cross)	攀升 (*pān-shēng*; rise)	越 (*yuè*, pass)	进 (*jìn*; enter)	透 (*tòu*; penetrate)
manner verbs (59.3%)	**looking verbs (default verbs)** (28.0%)	望 (*wàng*; look; more formal)	看 (*kàn*; look; more colloquial)	打量 (*dǎ-liàng*; measure sth.-with-the-eye)	纵观 (*zòng-guān*; vertical-look)	俯视 (*fǔ-shì*; overlook)
	animal verbs (4.0%)	抓 (*zhuā*; grab)	奔 (*bēn*; run-quickly)	卧 (*wò*, crouch)	闯 (*chuǎng*; rush)	跃 (*yuè*, jump)
	liquid verbs (0.7%)	涌 (*yǒng*; pour)				
	force verbs (11.6%)	投 (*tóu*; cast)	撞 (*zhuàng*; bump-against)	射 (*shè*, shoot)	刺 (*cì*, pierce)	冲撞 (*chōng-zhuàng*; collide)
	radiation verbs (11.6%)	映 (*yìng*; project)				
	miscellany (3.3%)	划 (*huá*, slide)	填 (*tián*; fill)	飘 (*piāo*; waft)	覆盖 (*fù-gài*; cover)	

Generally speaking, three types of verbs are employed in visual path depictions, and they are general motion verbs, path verbs, and manner verbs. General motion verbs are verbs that contain little path or manner information but indicate some sense of motion. They include verbs expressing extension, such as 伸展 (*shēn-zhǎn*; stretch); verbs encoding pure motion,

such as 移 (*yí* move); and verbs expressing static meaning but implying the occurence of motion, such as 停留 (*tíng-liú*, stay). General motion verbs can describe bidirectional fictive movement, as shown in the following two examples.

(4-83) 起伏的山野，清冽的空气，湛蓝的天空，绿色葡萄园在视线里一路**铺陈**。

qǐ-fú-de shān-yě,	qīng-liè-de	kōng-qì	zhàn-lán-de	tiān-kōng,	lǜ-sè
rolling mountains	clear	air	blue	sky	green

pú-táo-yuán	zài-shì-xiàn-lǐ	yí-lù	**pū-chén**.
vineyard	ZAI-sight-in	all-the-way	**spread-out**

The rolling mountains, the clear air, the blue sky, and the green vineyard spread out along the line of sight.

(4-84) 我把目光**移到**远处，突然想到，北方丛山背后，应该是纪伯仑的家乡。

wǒ bǎ	mù-guāng	**yí-dào**	yuǎn-chù,	tū-rán	xiǎng-dào,
I BA	gaze	**move-to**	distance	suddenly	think

běi-fāng	cóng-shān-běi-hòu,	yīng-gāi	shì	jìbó-lún-de	jiā-xiāng.
northern-part	mountains-back	should	be	Gibran	hometown

I moved my gaze to the distance, and it came to me suddenly that it is the hometown of Gibran behind the northern mountains.

In the sentence in (4-83), the mountains and plains, the air, the sky, and the vineyard are conceptualized as moving entities that spread all the way along the line of sight. In the sentence in (4-84), the sight is conceptualized as a controllable entity that is moved into the distance.

Path verbs make up more than one third of the motion verbs depicting visual paths. Similar to general motion verbs, path verbs are able to specify the fictive motion of bidirectionality, as shown in (4-85) and (4-86).

(4-85) 站在原上，易北河的风光便都**到**了眼里。

zhàn	zài-yuán-shàng,	yìběi-hé-de	fēng-guāng	biàn dōu
stand	ZAI-plain-on	Yibei-River-ASSOC	scenery	then all

dào-le	yǎn-lǐ.
arrive-PFV	eye-in

(If you) stand on the plain, the scenery of the Yibei River comes into your eyes.

(4-86) 目光所**到**之处，总是绿，绿，绿。

mù-guāng	suǒ-**dào**-zhī-chù,	zǒng	shì	lǜ,	lǜ,	lǜ.
eye-light	**arrive**-NOM-place	always	is	green	green	green

Where the gaze arrives at is always green.

The interaction of the Experiencer and the Experienced in the above two sentences are both depicted by the verb 到 (dào; arrive-at), but it specifies different directions. In the sentence in (4-85), the scenery (the Experienced) is conceptualized as moving and arriving at the eyes (the entity associated with the Experiencer); whereas in (4-86), the sight, representing the Experiencer, is described as the moving entity.

Manner verbs account for 59.3% of all the verbs used in visual paths. They are further grouped into looking verbs, animal verbs, liquid verbs, force verbs, radiation verbs, and miscellany verbs, among which looking verbs take up 28.0%. It is not surprising that looking verbs can only describe the fictive motion from the Experiencer to the Experienced. Looking verbs themselves do not encode displacement motion information, and thus visual path sentences with looking verbs exhibit less dynamic features than those with other manner verbs. The dynamic meaning usually comes from the directional adpositional phrases or verb complements following the verb, as shown in the following two sentences.

(4-87) 她们**望进**你的眼底，就在那一瞬，在你还不明所以时，对话便开始了。

　　　tā-men　**wàng-jìn**　nǐ-de　　yǎn- dǐ,　　　jiù　zài-nà-yíshùn,
　　　they　　**look-into**　your　　eye-bottom　　right　at-that-moment

　　　zài-nǐ-hái-bù-míng-suǒ-yǐ-shí,　　　duì-huà　biàn　kāi-shǐ　le.
　　　when-you-not-understand　　　　　dialogue　then　begin　PFV

　　　They look into your eyes. Right at that moment when you don't know what happened, the dialogue has begun.

(4-88) 我**顺着**他的手指**望过去**，心一下子就凉了。

　　　wǒ **shùn-zhe**　tā-de　　shǒu-zhǐ　**wàng-guò-qù**,　xīn　yíxià-zi-jiù　liáng le.
　　　I　 **follow-DUR**　his　　finger　　**look-over**　　heart　immediately　cold CRS

　　　I looked over following his finger, and I became disappointed immediately.

The directional verb complement 进 (jìn; into) in the sentence in (4-87) after the verb 望 (wàng; look) specifies the path of the visual motion. In the sentence in (4-88), both the verb complement 过去 (guò-qù, over-go) and the adpositional phrase 顺着 (shùn-zhe; following) contribute to the conveying of the dynamic sense.

Although animal verbs only take up 4.0% of all the verbs, they include as many as eight types. Seven of them depict the motion from the Experienced to the Experiencer, as illustrated in (4-89), (4-90), and (4-91). In the sentence in (4-89), the eye-catching blue door perceived by the eyes is conceptualized as an animal that grasps the eyeballs. The sentence in (4-90) describes the grassland as rushing into the eyes. In contrast to (4-89) and (4-90), the sentence in (4-91)

describes the static scenario as that the scenery is crouching in the eyes, but it is entailed that the scenery had moved into the eyes before it came into the eyes and stayed there.

(4-89) 拍摄这幅图片时，我刻意保留了画面左边蓝色的木门，室外的自然光使其色彩趋于饱和，可以第一时间**抓**人眼球。

pāi-shè zhè-fú tú-piàn shí wǒ kè-yì bǎo-liú-le
shoot this-CL photo when I deliberately keep-PFV

huà-miàn zuǒ-biān lán-sè-de mù-mén, shì-wài-de
picture left blue wooden-door outdoor-ASSOC

zìrán-guāng shǐ qí sè-cǎi qū-yú-bǎo-hé, kě-yǐ
natural-light make it colour tend-to-saturate can

dì-yī-shí-jiān **zhuā** rén yǎn-qiú.
instantly **grab** people eyeball

I deliberately kept the blue wooden door on the left of the picture when I shot it. The natural light from outside made its colour almost saturated, so that it can grab people's attention instantly.

(4-90) 走进公园，**闯入**眼帘的是大片的绿色草坪。

zǒu-jìn gōng-yuán, **chuǎng-rù**-yǎn-lián-de shì dà-piàn-de lǜ-sè
walk-in park **rush-into**-eye-curtain-NOM is large-area-of green

cǎo-píng.
grassland

(When you) walk into the park, what comes into (your) eyes is a large area of green grassland.

(4-91) 富春山居度假村……独踞山巅幽处，如带江水、绿茵球场静**卧**眼底。

fù-chūn-shān-jū-dù-jiǎ-cūn… dú jù shān-diān yōu-chù,
Fuchun-Resort uniquely located mountain-top quiet-place

rú-dài jiāng-shuǐ, lǜ-yīn qiú-chǎng jìng-**wò**-yǎn-dǐ.
like-ribbon river grassland field quietly-**crouch**-eye-bottom

Fuchun Resort is located uniquely at a quiet place on the mountain top. The ribbon-like river and the field full of grass quietly crouch in the eyes.

The following sentence in (4-92) with an animal verb depicts the fictive motion from the Experiencer to the Experienced, in which the eyesight is conceptualized as following the shadow and then moving into the distance.

(4-92) 回头看见我的背影，从船上投射海中，眼光**跟**了它过去，在无尽远处，窥见……圆月。

huí-tóu kàn-jiàn wǒ-de bèi-yǐng, cóng chuán-shàng tóu-shè
turn-back see my image from boat-on project

hǎi-zhōng,	yǎn-guāng **gēn**-le		tā	guò-qù,	zài-wú-jìn-yuǎn-chù,
sea-in	eye-light **follow**-PFV		it	over	ZAI-endless-distance

kuī-jiàn…	yuán-yuè
see	full-moon

(When I) turned back I saw my image projecting from the boat into the sea. My eyes followed it and in the endless distance I saw the full moon.

There is only one liquid verb that is employed in visual path sentences, and it describes the fictive motion from the Experienced to the Experiencer. The sentence in (4-93) illustrates this case.

(4-93) 走进……大厅，那一片两层楼高的落地窗前，整片翠绿的葡萄园与淡淡的远山及蓝天**涌入**视野。

zǒu-jìn…	dà-tīng,	nà	yī-piàn	liǎng-céng-lóu-gāo-de
walk-into	hall	that	one-CL	two-storied-building-high-NOM

luò-dì-chuāng-qián,	zhěng-piàn	cuì-lǜ-de	pú-táo-yuán	yǔ
French-window-front	whole-CL	green	vineyard	and

dàn-dàn-de	yuǎn-shān	jí	lán-tiān	**yǒng-rù**	shì-yě.
vague	distant-mountain	and	blue-sky	**flood-into**	view

(If you) walk into the hall (and stand) in front of the French window as high as a two-storied building, the whole green vineyard, the vague distant mountains, and the blue sky all flood into your eyes.

Force verbs account for 11.6% of all the verbs employed in visual path expressions. The fictive motion they describe is bidirectional depending on the individual verbs, as shown in the following examples in (4-94) and (4-95). In (4-94), the gaze is conceptualized as a concrete entity separated from the Experiencer that is cast towards somewhere. The verb 投 (*tóu*; cast) is frequently used in visual path sentences. The example in (4-95) shows the situation in which the scenery bumps into the vision, i.e., the Experienced goes to the Experiencer with some kinetic energy.

(4-94) 我们 8 个人面面相觑，**向**老花眼**投去**敬佩与羡慕的眼光。

wǒ-men	8-gè	rén	miàn-miàn-xiāng-qù,	**xiàng**	lǎo-huā-yǎn
we	8-CL	people	look-at-each-other	**towards**	old-man

tóu-qù	jìng-pèi	yǔ	xiàn-mù-de	yǎn-guāng.
cast-go	admiring	and	envious	eye-light

The eight of us looked at each other and cast admiring and envious gaze towards the old man.

(4-95) 没过一会儿，天边大漠里一座巨大的金黄色城堡强烈**冲撞**着你的视线。

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mǎ-guò-yìhuǐer,	tiān-biān	dà-mò-lǐ	yī-zuò	jù-dà-de
soon	in-distance	desert-in	one-CL	huge

jīn-huáng-sè	chéng-bǎo	qiáng-liè	**chōng-zhuàng**-zhe	nǐ-de	shì-xiàn.
golden	castle	violently	**bump**-DUR	your	eye-line

Soon, a huge golden castle in the distant desert bumped violently into your eyes.

Although radiation verbs take up as many as 11.6% of all the verbs employed, there is only one type identified, namely, 映 (yìng; radiate). In most cases it occurs in the four-character phrase 映入眼帘 (yìng-rù-yǎn-lián; radiate-into-eye-curtain), which depicts the fictive motion from the Experienced to the Experiencer, as exemplified in the example in (4-96).

(4-96)　一路上，怪石、蓝天、羊群交错地**映入眼帘**。

yílù-shàng,	guài-shí	lán-tiān,	yáng-qún
along-the-way	picturesque-rock	blue-sky	flock-of-sheep

jiāo-cuò-de	**yìng-rù-yǎn-lián**.
at-staggered-times	**project-into-eye-curtain**

The picturesque rocks, the blue sky, and flocks of sheep project into the eyes at staggered times along the way.

The use of radiation verbs in visual path expressions can be explained by the fact that the image perceived by the eyes is the result of the reflection of the light from some object. Thus radiation path is involved as one aspect of visual path.

The last type of manner verbs is miscellany verbs, which are verbs encoding manner information but sharing few features with other verbs and are thus difficult to group. The following three sentences exemplify this type.

(4-97)　海底也有峡谷，只见珊瑚礁猛地滑落于海底悬崖之下，当然也**滑出**了我们的视线。

hǎi-dǐ	yě	yǒu	xiá-gǔ,	zhǐ-jiàn	shān-hú-jiāo	měng-de
sea-bottom	also	have	canyon	only-see	coral-reef	suddenly

huá-luò	yú-hǎi-dǐ-xuán-yá-zhī-xià,	dāng-rán	yě	**huá-chū-**
slide-drop	ZAI-sea-bottom-cliff-ASSOC-down	of-course	also	**slide-out-**

le	wǒ-men-de	shì-xiàn.
PFV	our	vision-line

Canyons also exist at the bottom of the sea. (We) could see that the coral reef slid and dropped off the cliff in the sea, and of course it also slid out of our visual field.

(4-98)　在这迟滞着前进的线路上，风景便是一曲慢歌行板，悠扬地**飘进**我们的眼中。

zài-zhè-chízhìzhe-qián-jìn-de-xiàn-lù-shàng,	fēng-jǐng	biàn-shì	yī-qǔ
ZAI-this-slowly-DUR-progress-NOM-journey-on	scenery	is	one-CL

màn-gē-xíng-bǎn,	yōu-yáng-de	**piāo-jìn**	wǒ-men-de	yǎn-zhōng.
slow-andante	mellifluously	**float-into**	our	eyes-in

(We) moved very slowly on this journey. The scenery was like a slow andante that floated into our eyes mellifluously.

(4-99) 雀跃着投入了魔法森林的怀抱。立刻被瘦瘦的高高的密密的树们给眼睛**填满**了绿色。

què-yuè-zhe	tóu-rù-le	mó-fǎ-sēn-lín-de	huái-bào	lìkè
delightedly	run-into-PFV	magic-forest-ASSOC	hug	immediately

bèi	shòu-shòu-de	gāo-gāo-de	mìmìde	shù-men	gěi	yǎn-jīng
BEI	thin	tall	dense	trees	for	eyes

tián-mǎn-le	lǜ-sè.
fill-full-PFV	green

(We) ran into the magic forest delightedly, and our eyes were filled with green by the thin, tall, and dense trees.

As for the direction of the fictive movement, the idiosyncratic miscellany verbs usually depict how the Experienced moves into or out of the eyes.

4.4.1.3 *The direction of visual paths and the verbs*

Modern Standard Chinese can describe visual paths in either direction. Based on the collected data, some verbs are only found to be employed in one direction while a few other verbs are available for depicting both directions. Three verbs are identified in the written data that are capable of encoding bidirectional fictive movement. They are 到 (*dào*; arrive-at) as illustrated in (4-100) and (4-101), 透 (*tòu*; penetrate) in (4-102) and (4-103), and 停留 (*tíng-liú*, stay) in (4-104) and (4-105). The examples in (4-100), (4-102), and (4-104) illustrate the visual fictive motion from the Experienced to the Experiencer, and the examples in (4-101), (4-103), and (4-105) describe the visual path from the Experiencer to the Experienced. The verb 停留 (*tíng-liú*, stay) in (4-104) and (4-105) is actually a state verb, but it implies movement prior to that static state.

(4-100) 站在原上，易北河的风光便都**到**了眼里。

zhàn	zǎi-yuán-shàng,	yìběi-hé-de	fēng-guāng	biàn	dōu	**dào-**
stand	ZAI-plain-on	Yibei-River-ASSOC	scenery	then	all	**arrive-**

le	yǎn-lǐ.
PFV	eye-in

(If you) stand on the plain, the scenery of the Yibei River comes into your eyes.

(4-101) 目光所**到**之处，总是绿，绿，绿。

mù-guāng-suǒ-**dào**-zhī-chù,   zǒng   shì   lǜ,   lǜ,   lǜ.
sight-**arrive**-NOM-place   always   is   green green green

Where the gaze arrives at is always green.

(4-102) 银饰**透过**玻璃，不分彼此地在灯光下闪闪发亮。

yín-shì   **tòu-guò**   bō-lí   bù-fēn-bǐ-cǐ-de
silver-jewellery   **pass-through**   galss   together

zài-dēng-guāng-xià   shǎn-shǎn-fā-liàng.
ZAI-light-under   shine

The silver jewellery shines together under the light through the glass.

(4-103) 药房门紧锁着，**透过**玻璃，能看见屋里架子上……的瓶瓶罐罐。

yào-fáng-mén   jǐn-suǒ-zhe,   **tòu-guò**   bō-lí   néng
pharmacy-door   tightly-locked-DUR   **pass-through**   glass   can

kàn-jiàn wū-lǐ   jià-zi-shàng-de   píng-píng-guàn-guàn.
see   room-in   shelf-on-NOM   bottles

The door of the pharmacy is locked tightly. (We) can see many bottles on the shelves in the room through the glass.

(4-104) **停留**在目光中的，还有水月宫。

tíng-liú   zài-mù-guāng-zhōng-de,   hái   yǒu   shuǐ-yuè-gōng.
stay   ZAI-eye-light-in-NOM   also   have   Shuiyue-Palace

What also stays in the gaze is Shuiyue Palace.

(4-105) 视线**越过**夜晚的塞纳河，然后在闪光的埃菲尔铁塔上久久**停留**。

shì-xiàn   **yuè-guò**   yè-wǎn-de   sāi-nà-hé, rán-hòu
vision-line   **pass**   night-ASSOC   Seine   then

zài-shǎn-guāng-de-āi-fēi-ěr-tiě-tǎ-shàng   jiǔ-jiǔ   **tíng-liú**.
ZAI-shining-Eiffel-Tower-on   for-a-long-time   **stay**

(Somebody's) gaze passed the night Seine and stayed at the shining Eiffel Tower for a long time.

Although all of the three verb types, i.e., general motion verbs, path verbs, and manner verbs, are capable of delineating bidirectional fictive motion events, which verb type expresses which direction of the visual path is not purely haphazard. For example, general motion verbs can express fictive movement of bidirectionality, but if observing in detail, we can find that apart from the verb 停留 (tíng-liú, stay) that occurs with paths of both directions, all the other verbs encoding general motion meaning depict visual paths from the Experiencer to the Experienced, and all the verbs expressing existence meaning that indicates preceding movement depict the visual paths from the Experienced to the Experiencer. As for path verbs,

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most of them appear in visual path expressions depicting the motion from the Experiencer to the Experienced, with the exceptions that 到 (*dào*; arrive-at) and 透 (*tòu*; penetrate) occur in both directions, as illustrated above; and that 入 (*rù*, enter), 进 (*jìn*; enter), 来 (*lái*; come) and 接近 (*jiē-jìn*; approach) are solely for the fictive motion from the Experienced to the Experiencer. With regard to proportion, 78.6 % of the path verbs occur in the fictive motion from the Experiencer to the Experienced. It is possible for manner verbs to depict visual paths of both directions, but novel manner verbs occur more frequently in visual path expressions from the Experienced to the Experiencer. It is within our expectation that all the looking verbs are employed to encode the fictive motion from the perceiver to the view perceived, and all the radiation verbs are used to depict the fictive motion from the Experienced to the Experiencer. Taking all the remaining types of manner verbs including force verbs, animal verbs, liquid verbs, and miscellany verbs together, 18 out of 23 types, and 34 out of 54 tokens are employed in visual path sentences depicting fictive motion from the Experienced to the Experiencer. To sum up, path verbs in visual path expressions tend to describe the fictive motion from the Experiencer to the Experienced, and creative manner verbs tend to depict the fictive motion from the Experienced to the Experiencer.

4.4.1.4 Metaphors in visual paths

Some metaphoric mappings are constantly observed in visual path expressions. Four metaphoric mappings will be discussed here. The mapping THE GAZE/LINE OF SIGHT IS A CONCRETE OBJECT underlies many expressions when the fictive motion is conceptualized as going from the Experiencer to the Experienced. See the examples from (4-106) to (4-109).

(4-106) 即使再细心的参观者也只能在离开前匆匆**投注**一个礼貌而抱歉的**目光**。

jí-shǐ	zài-xì-xīn-de	cān-guān-zhě	yě-zhǐ-néng	zài-lí-kāi-qián
even	the-most-careful	visitor	only-can	before-leaving

cōng-cōng	**tóu-zhù**	**yī-gè**	lǐ-mào	ér	bào-qiàn-de	**mù-guāng**.
hastily	**cast**	**one-CL**	polite	and	sorry	**eye-light**

Even the most careful visitor can do nothing but cast a polite and sorry gaze hastily before leaving.

(4-107) 再**把视线移向**远方，蔚蓝的爱琴海和天空交织在了一起。

zài	**bǎ**	**shì-xiàn**	**yí-xiàng**	yuǎn-fāng,	wèi-lán-de	ài-qín-hǎi
then	**BA**	**vision-line**	**move-towards**	distance	blue	Aegean-Sea

hé	tiān-kōng	jiāo-zhī	zài-le-yì-qǐ.

and   sky   interweave ZAI-PFV-together

Then (I) moved my line of sight towards the distance; the blue Aegean Sea and the sky interwoven with each other.

(4-108) 正在此时，一群头上长着麻灰色绒毛的小鸟把我的视线紧紧地抓住了。

zhèng-zài-cǐ-shí,   yì-qún   tóu-shàng-zhǎng-zhe-má-huī-sè-róng-máo-de
at-that-moment   a-flock   head-on-grow-grey-hair-NOM

xiǎo-niǎo   **bǎ**   wǒ-de   **shì-xiàn**   jǐn-jǐn-de   **zhuā-zhù**   le.
bird   **BA**   my   **vision-line** tightly   **grab**   CRS

At the moment, a flock of birds with grey heads grabbed my line of sight tightly.

(4-109) 人立马也变高了，**目光射出去**，似乎也带上了五十三层大楼的份量。

rén   lì-mǎ   yě   biàn-gāo le,   **mù-guāng shè-chū-qù**,   sìhū
people   instantly also   grow-taller CRS **eye-light shoot-out-go** seem

yě   dài-shàng-le   wǔ-shí-sān-céng-dà-lóu-de   fèn-liàng.
also   take-along-PFV   53-floored-building-ASSOC   weight

People instantly grow taller. It seems that when the line of sight shoots out, it takes along the weight of a 53-floored building.

All the four sentences above conceptualize the gaze as a concrete object. In (4-106), the gaze is modified by a quantifier and a classifier. The sentence in (4-107) adopts the *bǎ* construction, in which the line of sight is placed immediately after *bǎ*, indicating that the line of sight, as a disposable and controllable object, undergoes some physical displacement. There is a very obvious rhetorical flavour in the sentence in (4-108) where the arresting charm of the bird is described through describing the line of sight as being held tightly by the bird. In the sentence in (4-109), the line of sight is conceptualized as something similar to light. This point is evidenced by the encoding of the line of sight as 目光 (*mù-guāng*; eye-light; line-of-sight), and also by the verb 射 (*shè*, shoot), which is frequently used in describing radiation paths as exemplified in (4-50), (4-59), and (4-60).

A more specific instantiation of the last mapping is THE GAZE/LINE OF SIGHT IS A STRETCHY LINE, in which the gaze or line of sight is conceptualized as a line capable of moving or stretching, as illustrated in the examples from (4-110) to (4-113).

(4-110) 随着视线的延伸，一池卤水映出了万里晴空。

suízhe   **shì-xiàn-de**   **yán-shēn**,   yī-chí   lǔ-shuǐ   yìng-chū-le
with   **vision-line-ASSOC**   **extension**   one-CL   brine   project-out-PFV

wàn-lǐ-qíng-kōng.
boundless-clear-sky

With the extension of the line of sight, (you can see that) the brine in the pond projects out the boundless clear sky.

(4-111) 我们的**目光向**牧场，**向**碧湖，**向**青山，贪婪地**伸展而去**。

wǒ-men-de	**mù-guāng**	**xiàng**	mù-chǎng,	**xiàng**	bì-hú,
our	**eye-light**	**towards**	pasture	**towards**	blue-lake

xiàng	qīng-shān,	tān-lán-de	**shēn-zhǎn-ér-qù**.
towards	green-mountain	greedily	**extending-in-the-manner-of-go**

Our gaze extends towards the pasture, the blue lakes, and the green mountains.

(4-112) 试着**把目光**一点一点的**收回来**，撤后一步，再一点一点的**放出去**，异观立刻又出现了。

shì-zhe	**bǎ**	**mù-guāng**	yì-diǎn-yì-diǎn-de	**shōu-huí-lái**,	chè-
try	**BA**	**eye-light**	little-by-little	**draw-back-come**	withdraw-

hòu-yī-bù,	zài	yì-diǎn-yì-diǎn-de	**fàng-chū-qù**,	yì-guān
back-one-step	again	little-by-little	**release-out-go**	extraordinary-view

lìkè	yòu	chū-xiàn	le.
instantly	again	appear	CRS

(I) tried to draw the line of sight back little by little, stepped back, and released it again little by little, and then the extraordinary view appeared again instantly.

(4-113) **顺着**他的**目光向**远处**望去**，飘逸的云雾缠绕着深蓝色的高山。

shùn-zhe	tā-de	**mù-guāng**	**xiàng**	yuǎn-chù	**wàng-qù**,	piāo-yì-de
follow-DUR	his	**eye-light**	**towards**	distance	**look-go**	intangible

yún-wù	chán-rào-zhe	shēn-lán-sè-de	gāo-shān.
clouds	surround-DUR	dark-blue	high-mountain

(I) looked towards the distance following his line of sight (and saw) the dark blue high mountain surrounded by intangible clouds.

In (4-110), the Figure of the event is linguistically encoded as 视线 (*shìxiàn*; vision-line; line of sight) that can extend. The next two sentences in (4-111) and (4-112) encode the gaze as 目光 (*mù-guāng*; eye-light), which extends towards various Goal locations in (4-111) and was drawn back and sent out gradually in (4-112). In the sentence in (4-113), the line of sight of one person is conceptualized as a reference axis with respect to which the line of sight of another person fictively moves.

When the Experiencer is passively impinged upon by the Experienced, the eye or the line of sight or the visual field is frequently conceptualized as a container. I use the formula THE EYE IS A CONTAINER to represent this type of mapping. Sentences from (4-114) to (4-117) exemplify this metaphoric mapping.

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(4-114) 忽然，路旁一座座庞大坚实的古窑**撞入**眼帘。

hū-rán,	lù-páng	yí-zuò-zuò	páng-dà-jiān-shí-de	gǔ-yáo
suddenly	roadside	one-CL-CL	large	ancient-kilns

zhuàng-rù	yǎn-lián.
bump-into	eye-curtain

Suddenly, ancient large kilns along the roadside ran into the eyes.

(4-115) 站在原上，易北河的风光便都**到**了眼**里**。

zhàn	zài-yuán-shàng,	yì-běi-hé-de	fēng-guāng	biàn	dōu
stand	ZAI-plain-on	Yibei-River-ASSOC	scenery	then	all

dào-le	yǎn-**lǐ**.
arrive-PFV	eye-**in**

(If you) stand on the plain, the scenery of the Yibei River comes into your eyes.

(4-116) 四野的景物，又历历**入**目。

sì-yě-de	jǐng-wù,	yòu	lì-lì-**rù**-mù
surrounding-field	scenery	again	all-**enter**-eye

The full scenery of the surrounding field enters the eyes again.

(4-117) 海底也有峡谷，只见珊瑚礁猛地滑落于海底悬崖之下，当然也**滑出**了我们的视线。

hǎi-dǐ	yě	yǒu	xiá-gǔ,	zhǐ-jiàn	shān-hú-jiāo	měng-de
sea-bottom	also	have	canyon	only-see	coral-reef	suddenly

huá-luò	yú-hǎi-dǐ-xuán-yá-zhī-xià,	dāng-rán	yě	**huá-chū-**
slide-drop	ZAI-sea-bottom-cliff-ASSOC-down	of-course	also	**slide-out-**

le	wǒ-men-de	shì-xiàn.
PFV	our	vision-line

Canyons also exist at the bottom of the sea. (We) could see that the coral reef slid and dropped off the cliff in the sea, and of course it also slid out of our visual field.

The sentences in (4-114), (4-115), and (4-116) describe the visibility of some object through describing the objects as entering the eyes. The sentence in (4-117) expresses the invisibility of some previously visible object by describing it as exiting the visual field. This mapping is also applicable to fictive motion from the Experiencer to the Experienced and then back to the Experiencer with the Experiencer as the Agent, as seen in (4-118).

(4-118) 站在观景台上，**把**上万亩色彩纷呈的梯田**收入**眼底。

zhàn	zài-guān-jǐng-tái-shàng,	**bǎ**	shàng-wàn-mǔ
stand	ZAI-viewing-deck-on	**BA**	thousands-of-acres

sè-cǎi-fēn-chéng-de	tī-tián	**shōu-rù**-yǎn-dǐ.

| colourful | terrace | **draw-into-**eye-bottom |

The view of the thousands of acres of colourful terrace is drawn into the eyes by (somebody) standing on the viewing deck.

When the entity that is visually perceived by the eyes plays the dynamic role, it is conceptualized as an animal sometimes. The metaphoric mapping THE PERCIEVED ENTITY IS AN ANIMAL is exemplified in sentences (4-89), (4-90), and (4-91) above in Section 4.4.1.2 where animal verbs are discussed.

4.4.2 Auditory paths

Auditory path expressions describe auditory perception as involving fictive motion between the person who experiences the hearing (the Experiencer) and the sound heard (Experienced). Sentences involving auditory paths will be analysed in terms of the participants in the events (Section 4.4.2.1), verbs (Section 4.4.2.2), and metaphoric mappings (Section 4.4.2.3).

4.4.2.1 Participants in auditory paths

In contrast to visual paths that conceptualize either the Experiencer or the Experienced as the moving entity, auditory path expressions usually endow the Experienced with the dynamic feature while encode the Experiencer as the passive receptor of the sound, and the Experiencer is expressed as either the Path or Goal location of the movement. As illustrated in Table 4.10, the participants in auditory path sentences mainly include the Figure (i.e., the Experienced), the Agent, the Source location, the Path location, the Goal location, and the General location where the auditory path takes place. The Experiencer is encoded either as the Path location or the Goal location depending on the linguistic context. The Agent is involved when a *bǎ* construction is used or when the producer of the sound is encoded.

Table 4.10 Examples of participants in auditory path expressions

Figure/Experienced	歌曲 (*gē-qǔ*; song)	蝉声 (*chán-shēng*; cicadas-sound)	呻吟 (*shēn-yín*; groan)	笑声 (*xiào-shēng*; laughter)
	雷鸣 (*léi-míng*; thunder)	声音 (*shēng-yīn*; sound)	噪音 (*zào-yīn*; noise)	冬不拉 (*dōng-bù-lā*; tambura)
Agent	三轮车 (*sān-lún-chē*;	驼队 (*tuó-duì*; camel-team)	夜风 (*yè-fēng*; night-breeze)	风 (*fēng*; wind)

		tricycle)			
Ground	**Source locations**	身后 (*shēn-hòu*; body-back)	音响 (*yīn-xiǎng*; loudspeaker)	远方 (*yuǎn-fāng*; distance)	酒吧 (*jiǔ-bā*; pub)
	Path locations (including the Experiencer)	耳边 (*ěr-biān*; ear-side)	枝叶 (*zhī-yè*, branches-leaves)	腰 (*yāo*; waist)	云 (*yún*; cloud)
	Goal locations (including the Experiencer)	耳膜 (*ěr-mó*, eardrum)	花园 (*huā-yuán*; garden)	地面 (*dì-miàn*; ground)	枫林 (*fēng-lín*; sugarbush)
	General locations	广场 (*guǎng-chǎng*; square)	空气 (*kōng-qì*; air)	空山 (*kōng-shān*; empty-mountain)	白桦林 (*bái-huà-lín*; birch-forest)

The Experienced, which is realized by various types of sound, is the constantly present participant, whereas all the others are optional depending on the context. The movement of the sound is characterized by the Source location, the Path location, the Goal location, and the General location, among which the Source location is the most frequently encoded. The General location specifies the location where an auditory path takes place generally, such as 洞中 (*dòng-zhōng*; cave-in; inside-the-cave) in (4-119) below.

(4-119) 牛羊脖子上的铜铃声，伴着炊烟的味道，**在洞中飘荡**。

> niú-yáng-bó-zi-shàng-de　　　tóng-líng-shēng,　　bàn-zhe　　chuī-yān-de
> cattle-sheep-neck-on-NOM　　copper-bell-sound　　with　　　smoke-ASSOC
>
> wèi-dào, **zài-dòng-zhōng piāo-dàng**.
> smell **ZAI-cave-in　　wander**
>
> The sound of the copper bells on the necks of the cattle and sheep wanders in the cave with the smell of the smoke.

The General location in auditory path expressions is different from the location in a locative event where a motionless object is located at a site. It provides the general information about the location within which the auditory fictive motion occurs. In this case, the Source, Path and Goal locations are usually too intangible to be encoded and thus of little interest.

The absence of the Experiencer is quite normal in auditory path expressions, in which case usually the Source, or Path, or Goal, or General location is described. The sentence in (4-120) illustrates the auditory fictive motion without an Experiencer.

(4-120) 笑声**穿过**郁郁葱葱的藤蔓**传来**。

> xiào-shēng **chuān-guò** yù-yù-cōng-cōng-de téng-màn **chuán-lái**.
> laughter **pass-through** dense vine **spread-come**

> Laughter came through the dense vines.

When the profiled reference point is some person, the Experiencer is encoded as either the Path location or the Goal location, as demonstrated in the following sentences in (4-121) and (4-122) respectively.

(4-121) 隆雷**过**耳，沥沥碎雨湿衣。

> lóng-léi **guò** ěr, lì-lì-suì-yǔ shī yī.
> thunder **pass** ear drizzle wet clothes

> The thunder went by the ears, and the drizzle wetted the clothes.

(4-122) 只有那辘辘的车轮声……断断续续的仍在**传到**他的耳朵里**来**。

> zhǐ-yǒu nà lù-lù-de-chē-lún-shēng…duàn-duàn-xù-xù-de réng zài
> only that wheel-sound on-and-off still DUR

> **chuán-dào** tā-de ěr-duo lǐ **lái**.
> **reach-to** his ear in **come**

> Only the sound of the wheels is still reaching on and off into his ears.

The Agent of an auditory sensory path is an entity that is capable of influencing the sound. Experientially speaking, the medium of the sound, such as the wind, influences the transmission of the sound. For the collected examples, the medium of the sound is described as being capable of controlling the transmission of the sound, as illustrated in (4-123).

(4-123) 从喜马拉雅山刮过来的大风吹动着寺庙的铜铃，叮当不绝，顺带也**把**诵经的声音**传出**很远。

> cóng xǐ-mǎ-lā-yǎ-shān guā-guò-lái-de dà-fēng chuī-dòng-zhe
> from Himalayas sweep-over-NOM gale blow-DUR

> sì-miào-de tóng-líng shùn-dài yě **bǎ**
> temple-ASSOC copper-bell incidentally also **BA**

> sòng-jīng-de-shēng-yīn **chuán-chū** hěn-yuǎn.
> chanting-sound **spread-out** very-far

> The gale from the Himalayas blew the copper bells in the temple, and it incidentally spread away the sound of chanting.

The sentence in (4-123) describes the fictive auditory path with a *bǎ* construction, in which the wind and the sound are the noun phrases before and after *bǎ* respectively, indicating that the wind is the more active participant controlling the sound. Another type of entity playing

the role of the Agent is the producer of the sound. The auditory path sentences involving the producer of the sound express the sound as a concrete and tangible entity, as shown in the example in (4-124).

(4-124) 不时有**三轮车**从路上驶过，**撒**下一串铃声。

> bù-shí   yǒu   **sān-lún-chē**   cóng lù-shàng   shǐ-guò,
> now-and-then there-are **tricycles**   from road-on   pass-by
>
> **sǎ-xià**   yí-chuàn   líng-shēng.
> **scatter-down** one-CL   tinkle-of-bells

Tricycles pass by now and then, leaving behind the tinkling of bells.

Based on our experience, the producer of sound (三轮车 [*sān-lún-chē*; tricycle] as in (4-124)) is more active than the sound in that the existence of the sound depends on its producer and that the direction of the movement is partly decided by the producer. The sentence in (4-125) further elaborates the activity differential between the producer of sound and the sound by using a *bǎ* construction.

(4-125) 会打铃铛的尾驼走起路来故意左右摇摆，**把**驼铃的声音**送出去**很远。

> huì-dǎ-líng-dāng-de   wěi-tuó   zǒu-qǐ-lù-lái
> can-make-bell-tinkle-NOM   last-camel-in-the-camel-team   when-walk
>
> gù-yì   zuǒ-yòu-yáo-bǎi,   **bǎ**   tuó-líng-de   shēng-yīn
> deliberately left-right-sway   **BA**   camel-bell-ASSOC   sound
>
> **sòng-chū-qù** hěn-yuǎn.
> **send-out-go** very-far

The last camel in the camel team that can make the bell tinkle swayed deliberately when walking, sending the sound of the bell into the distance.

4.4.2.2 *Verbs in auditory paths*

Generally speaking, the verbs in auditory path sentences can be categorized into three types, i.e., general motion verbs encoding little path or manner information, path verbs, and manner verbs. Table 4.11 below illustrates typical verbs used in auditory path expressions.

Table 4.11 Examples of verbs in auditory path expressions

general motion verbs (45.9%)	传 (*chuán*; spread)			绵延 (*mián-yán*; extend)	
path verbs (11.4%)	起 (*qǐ*; rise)	落 (*luò*, fall)	入 (*rù*, enter)	穿 (*chuān*; cross)	来 (*lái*; come)
manner verbs	sound verbs (default	响 (*xiǎng*; sound)		回响 (*huí-xiǎng*; resound)	发 (*fā*; produce-sound)

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(42.8%)	**verbs)** (2.2%)					
	vibration verbs (13.1%)	回荡 (*huí-dàng*; reverberate)	飘荡 (*piāo-dàng*; waft)	震荡 (*zhèn-dàng*; vibrate)	盘旋 (*pán-xuán*; circle-round)	回旋 (*huí-xuán*; circle-round)
	wind verbs (12.2%)	刮 (*guā*; blow)	飘 (*piāo*; waft)	吹 (*chuī*; blow)	飘扬 (*piāo-yáng*; waft-wave)	飘逸 (*piāo-yì*; waft-elegantly)
	liquid verbs (4.4%)	流 (*liú*, flow)	荡漾 (*dàng-yàng*; ripple)	流淌 (*liú-tǎng*; flow)	漂 (*piāo*; drift)	喷涌 (*pēn-yǒng*; gush)
	animal verbs (4.4%)	飞 (*fēi*; fly)	行 (*xíng*; walk)	送 (*sòng*; see-off)	循 (*xún*; follow)	游荡 (*yóu-dàng*; wander)
	force verbs (3.9%)	冲撞 (*chōng-zhuàng*; crash)	打破 (*dǎ-pò*, hit-broken)	挤 (*jǐ*; squeeze)	碰撞 (*pèng-zhuàng*; collide)	划 (*huá*, scratch)
	miscellany (2.6%)	释放 (*shìfàng*; release)	留下 (*liú-xià*, leave)	交织 (*jiāo-zhī*; interweave)	漏 (*lòu*; leak)	充斥 (*chōng-chì* be-filled-with)

There are two verbs encoding general motion information, one of which has an elongation meaning. The sentence in (4-126) characterizes the fictive motion of the sound with an elongation verb.

(4-126) 黎明前灰绿色的林子里，传来如海浪般**绵延**不停的鸟鸣声。

lí-míng-qián huī-lǜ-sè-de lín-zi-lǐ， chuán-lái rú-hǎi-làng-bān
dawn-before grey-green forest-in come like-waves

mián-yán-bù-tíng-de niǎo-míng-shēng.
extend-continuous twitter

From the grey-green forest came the twittering as continuous as waves before dawn.

In (4-126), the duration of the sound in time is conceptualized as the elongation of a long entity in space. Apart from this elongation verb that occurs only once, the other verb encoding general motion meaning is 传 (*chuán*; transmit/spread), which takes up 45.4% of all the verbs occurring in auditory path expressions. The sentences in (4-127) and (4-128)

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illustrate the use of 传 (*chuán*; transmit/spread) in auditory paths. There is usually a directional verb-complement after the verb specifying the path of the movement, such as 出 (*chū*; out) in (4-127) and 来 (*lái*; come) in (4-128). The subjects of the two sentences are both some type of sound, which is the Experienced entity.

(4-127) 大大小小的教堂内**传出**了欢乐的钟声和唱圣诗的歌声。

dà-dà-xiǎo-xiǎo-de   jiào-táng-nèi   **chuán-chū**-le   huān-lè-de
big-small   church-inside   **spread-out**-PFV joyous

zhōng-shēng   hé   chàng-shèng-shī-de   gē-shēng.
bell-sound   and   sing-hymn-NOM   singing

Joyous sound of bells and hymn singing came out from many churches.

(4-128) 小巷深处**传来**了淡淡的音乐声。

xiǎo-xiàng-shēn-chù   **chuán-lái**-le   dàn-dàn-de   yīn-yuè-shēng
small-alley-deep-place **spread-come**-PFV indistinct   music-sound

Indistinct music came from the depths of the alley.

Similar to general motion verbs, path verbs also tend to have the Experienced as the subject. The sound is characterized with verbs expressing various types of path information, such as 入 (*rù*, enter), 过 (*guò*, pass), and 起 (*qǐ*; rise), as shown in the following sentences from (4-129) to (4-131).

(4-129) 乘着平底船游河，热烈的西班牙吉他声声入耳。

chéng-zhe   píng-dǐ-chuán   yóu-hé,   rè-liè-de   xī-bān-yá   jítā
by   boat   on-river enthusiastic   Spanish   guitar

shēng-shēng-**rù**-ěr.
sound-all-**enter**-ear

(We) were rowing on a river, and the enthusiastic sound of Spanish guitar entered my ears constantly.

(4-130) 隆雷**过**耳，沥沥碎雨湿衣。

lóng-léi   **guò**   ěr,   lì-lì-suì-yǔ   shī   yī.
thunder   **pass**   ear   drizzle   wet   clothes

The thunder went by the ears and the drizzle wetted the clothes.

(4-131) 渡船到岸，船头上**起**了几声微微的水浪清音。

dù-chuán   dào   àn,   chuán-tóu-shàng   **qǐ**-le   jǐ-shēng
ferry   arrive   bank   ferry-front-end-on **rise**-PFV several-CL

wēi-wēi-de   shuǐ-làng-qīng-yīn.
indistinct   sound-of-waves

(When) the ferry arrived at the bank, some indistinct sound of the waves rose at the front end of the ferry.

Manner verbs employed in auditory path sentences account for 42.8% of all the verbs. They are further categorized into sound verbs, which are the default verbs to describe sound; vibration verbs, which specify the manner of the sound's movement as moving back and forth within some container-like location; wind verbs, which either describe the manner of the action of the wind (the wind as the Agent) or depict the movement of the sound in the wind (the wind as the medium); liquid verbs, which are normally used to describe the movement of liquid; animal verbs, which usually are employed to depict the manner of the movement of animals; force verbs, which indicate concomitant kinetic energy of the movement; and miscellany verbs.

Sound verbs usually take a directional grammatical element to describe the path of the movement. It is the directional grammatical element part that conveys the dynamic sense. Sentences containing a sound verb and a directional grammatical element tend to be auditory path expressions with the least degree of motion, as shown by the following sentences in (4-132) and (4-133). The verb-complement 出来 (*chū-lái*; out-come) in (4-132) plays the role of specifying the path of the movement, and the directional preposition 从远处 (*cóng-yuǎn-chù*; from-distance) in (4-133) helps to specify the path of the fictive motion on the part of the sound.

(4-132) 我们明知那些歌声，只是些因袭的言词，从生涩的歌喉里机械的**发出来**的。

wǒ-men   míng-zhī   nà-xiē   gē-shēng,   zhǐ-shì-xiē   yīn-xí-de   yán-cí,
we   know   those   singing   only-is-some old   lyrics

cóng   shēng-sè-de   gē-hóu-lǐ   jī-xiè-de   **fā-chū-lái**-de.
from   inexperienced voice-in   mechanically **send-out-come**

We know that the singing is just some old lyrics produced mechanically from inexperienced voices.

(4-133) 铃声**从远处响起来**，像一种召唤，给我指引了方向。

líng-shēng   **cóng yuǎn-chù**   **xiǎng-qǐ-lái**,   xiàng   yī-zhǒng   zhào-huàn,
bell   **from distance**   **ring-up-come**   like   one-CL   call

gěi   wǒ   zhǐ-yǐn-le   fāng-xiàng.
for   me   guide-PFV   direction

The bell rang from a faraway place, which guides me like a kind of call.

The similarity of vibration verbs is that they all specify the manner of movement of the sound in a back and forth way within a container-like location. The sentences in (4-134) and (4-135)

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illustrate the use of vibration verbs. In (4-134), the sound of the bell lingers in the valley by reverberating. In (4-135), the music stays in the church by circling around the ridge beams in the church.

(4-134) 每每寺里古钟敲响，浑厚的钟声便**回荡于**山谷**之间**。

  měi-měi sì-lǐ   gǔ-zhōng qiāo-xiǎng, hún-hòu-de zhōng-shēng
  every-time temple-in old-bell ring   deep   sound

  biàn **huí-dàng** **yú**-shān-gǔ-**zhī-jiān**.
  shall **reverberate** **ZAI**-valleys-**between**

  Whenever the old bell in the temple is tolled, its deep sound reverberates in the valleys.

(4-135) 更让人吃惊的，是祷告开始的时候，**回旋在**教堂雕梁画栋**间**的乐声。

  gèng ràng-rén chī-jīng-de, shì dǎo-gào-kāi-shǐ-de shí-hòu,
  more make-people surprised is prayer-start-NOM   time

  huíxuán **zài**-jiào-táng-diāo-liáng-huà-dòng-**jiān**-de yuè-shēng.
  circle-around ZAI-church-pillars-**between**-NOM   music

  What makes you more surprised is the music circling around the pillars in the church when the prayer starts.

The transmission of sound is impossible without a medium, which is frequently the air in daily life. The close relationship between the air and the sound is represented in language through encoding the interaction between the sound and the wind or air as exemplified by wind verbs. The sentences in (4-136) and (4-137) illustrate wind verbs. The wind verb 刮 (*guā*; blow) in (4-136) conceptualizes the sound as a tangible object that is moved by the wind. In (4-137), the music is conceptualized as moving in the manner of floating in the wind.

(4-136) 一句"离木屋不远了"随着大风**刮进**我冰冷的耳朵。

  yī-jù "lí-mù-wū-bù-yuǎn-le" suízhe dà-fēng **guā-jìn** wǒ
  one-CL from-wooden-house-not-far with   gale **blow-into** my

  bīng-lěng-de ěr-duo.
  cold   ears

  (The sound) "not far from the wooden house" was blown into my cold ears by the gale.

(4-137) 悠扬的乐声，在风里**飘出去**，又远远得**飘**了**回来**，回声竟然有五六次之多。

  yōu-yáng-de yuè-shēng, zài-fēng-lǐ **piāo-chū-qù**, yòu yuǎn-yuǎn-de
  melodious music   ZAI-wind-in **float-out-go** then remotely

  piāo-le-**huí-lái**, huí-shēng jìng-rán yǒu wǔ-liù-cì-zhī-duō.
  float-PFV-**back** echo   surprisingly have five-six-times-as-many

The melodious music floated out in the wind and then floated back from a remote place. It echoed as many as five or six times.

A set of verbs that are normally used to describe liquid is identified. In sentences with a liquid verb, the entity under discussion is frequently some form of music, as seen in the sentence in (4-138). Music tends to occur in artistic situations, and the description of it is quite poetic.

(4-138) 酒吧鳞次栉比……每一扇打开的窗中都**流淌出**串串乐符。

jiǔ-bā	lín-cì-zhì-bǐ…	měi-yī-shàn	dǎ-kāi-de	chuāng-zhōng
pub	placed-closely-side-by-side	every-CL	open	window-in

dōu	**liú-tǎng-chū**	chuàn-chuàn-yuè-fú
all	**flow-out**	CL-CL-music

The pubs are arranged closely in rows, and music flows out from every open window.

Four verbs that usually take an animal as the subject are observed, two of which are used to describe the fictive motion of sound, as seen in the sentences in (4-139) and (4-140).

(4-139) 钟楼中**飞下**一声宏钟，空山在音波的磅礴中震荡。

zhōng-lóu-zhōng	**fēi-xià**	yī-shēng	hóng-zhōng,	kōng-shān
bell-tower-in	**fly-down**	a-CL	large-bell	empty-mountain

zài-yīn-bō-de-páng-bó-zhōng	zhèn-dàng.
ZAI-sound-wave-ASSOC-high-volume-in	vibrate

The sound of a large bell flew down from the bell tower, and the empty mountain vibrated with the high volume of the sound.

(4-140) 人未到，声先**行**。

rén	wèi	dào,	shēng	xiān	**xíng**.
people	not	arrive	voice	first	**walk**

The person has not arrived yet, but his voice is heard.

The third animate verb describes the interaction between either the sound and the wind or the sound and its producer. The wind or the producer of the sound is expressed as a human-like object, as shown in the sentences in (4-141) and (4-142). The sound is described as a passively moving entity whose physical displacement is caused by the medium (in (4-141)) or the producer (in (4-142)) of the sound.

(4-141) 有的时候，**风**从牧群中间**送过来**银铃似的叮当声。

yǒu-de-shí-hòu,	**fēng** cóng	mù-qún-zhōng-jiān	**sòng-guò-lái**
sometimes	**wind** from	between-herds	**send-over**

yín-líng-shì-de	dīng-dāng-shēng.

silver-bell-alike   jingle

Sometimes the wind sends jingles like silver bells over through herds.

(4-142) 会打铃铛的**尾驼**走起路来故意左右摇摆，**把**驼铃的声音**送出去**很远。

huì-dǎ-líng-dāng-de	**wěi-tuó**	zǒu-qǐ-lù-lái
can-make-bell-tinkle-NOM	**last-camel-in-the-camel-team**	when-walk

gù-yì	zuǒ-yòu-yáo-bǎi,	**bǎ**	tuó-líng-de	shēng-yīn
deliberately	left-right-sway	**BA**	camel-bell-ASSOC	sound

sòng-chū-qù	hěn-yuǎn.
send-out-go	very-far

The last camel in the camel team, which can make the bell tinkle, swayed deliberately when walking and sent the sound of the bell into the distance.

The sentence containing the fourth animal verb describes the sound as a clue with which the Experiencer can follow, as illustrated in (4-143).

(4-143) 如果你**循着**蛙鸣，悄悄来到水边，就会发现正在鸣叫的青蛙。

rú-guǒ	nǐ	**xún-zhe**	wā-míng,	qiāo-qiāo	lái-dào	shuǐ-biān,
if	you	**follow-DUR**	frog-croak	quietly	come-to	waterside

jiù-huì	fā-xiàn	zhèng-zài	míng-jiào-de	qīng-wā.
will	find	DUR	croak-NOM	frogs

If you follow the croaks of the frogs and come to the waterside quietly, you will find the frogs.

The last type of manner verbs identifiable is force verbs. An auditory path sentence with a force verb takes the sound as the subject and describes it as a concrete tangible object moving with force, as shown in (4-144). This sentence describes the auditory experience as that the sound of the bell moves into the village in the manner of squeezing.

(4-144) 清脆的马铃声，在暮色降临之前的那道缝隙里**挤进**了沙溪的村子。

qīng-cuì-de	mǎ-líng-shēng,	zài-mù-sè-jiàng-lín-zhī-qián-de	nà-dào
ringing	horse-bell	before-dusk-come-NOM	that-CL

fèng-xì-lǐ	**jǐ-jìn**-le	shā-xī-de	cūn-zi.
gap-in	**squeeze-into**-PFV	Shaxi-NOM	village

The ringing bell of the horse squeezed into the village through the gap before dusk fell.

4.4.2.3 Metaphors in auditory paths

Generally speaking, the sound in fictive motion expressions is conceptualized as a concrete moving entity, but a more detailed investigation reveals more specific metaphoric mappings. Based on the examples collected, there are two possible metaphoric mappings. The first one

is MUSIC IS LIQUID. The sound of music can be characterized with other types of verbs, but liquid verbs usually take some form of music as the subject, as shown in the following sentences from (4-145) to (4-147). In reality, the medium of sound is air, but in these sentences, sound is conceptualized as liquid that is capable of conducting the action of gushing (as in (4-145)), rippling and drifting (as in (4-146)), and flowing (as in (4-147)).

(4-145) 如果没有店堂里**喷涌而出**的爵士和蓝调，恍然间你一定会觉得自己走进了某条巴黎小巷。

rú-guǒ	méi-yǒu	diàn-táng-lǐ	**pēn-yǒng-ér-chū**-de
if	no	shop-in	**gushing-in-the-manner-of-exit**-NOM

jué-shì	hé	lán-diào,	huǎng-rán-jiān	nǐ	yí-dìng-huì	jué-de	zì-jǐ
jazz	and	blues	suddenly	you	must	feel	yourself

zǒu-jìn-le	mǒu-tiáo	bā-lí	xiǎo-xiàng.
walk-into-PFV	some-CL	Paris	small-alley

If there is no jazz or blues gushing out from the shops, you must feel suddenly that you have walked into some small alley in Paris.

(4-146) 琴声和歌声就是从那矮房中散漫出来，**荡漾**在草地上又**飘流进**枫林中。

qín-shēng	hé	gē-shēng	jiù-shì	cóng	nà	ǎi-fáng-zhōng	sǎn-màn-
piano	and	singing	is	from	that	low-house-in	diffuse-

chū-lái,	**dàng-yàng**	zài-cǎo-dì-shàng	yòu	**piāo-liú-jìn**	fēng-lín-zhōng.
out	**ripple**	ZAI-grass-on	then	**float-flow-into**	sugarbush-in

The sound of piano and singing diffused out from that low house, rippled on the grass, and drifted into the sugarbush.

(4-147) 插入钥匙，旋转，推开门，一阵轻盈乐声缓缓**流淌**。

chā-rù	yào-shi,	xuán-zhuǎn,	tuī-kāi	mén,	yízhèn	qīng-yíng
insert	key	turn	push-open	door	one-CL	light

yuè-shēng	huǎn-huǎn	**liú-tǎng**.
music	slowly	**flow**

(I) inserted the key, turned it, and pushed the door open, and then light music was flowing slowly.

The second metaphoric mapping is SOUND IS A FORCEFUL ENTITY. Because the sound in auditory path expressions is the active participant that moves, it is not surprising that the sound is described as an object with some force. This metaphoric mapping is involved in the sentences from (4-148) to (4-151), especially in the verbs and adjectives in bold. The adjective 刺耳 (*cìěr*; stab-ear) in (4-151) conceptualizes the sharp and unpleasant sound as something that can stab the ears.

(4-148) 震耳欲聋的爆竹声顷刻**划破**天空。

    zhèn-ěr-yù-lóng-de   bào-zhú-shēng   qǐng-kè   **huá-pò**   tiān-kōng.
    deafening   firecrackers   instantly   **scratch-broken**   sky

    Deafening firecrackers instantly pierce the air.

(4-149) 人潮和声浪好像是被香精激活的荷尔蒙四处**冲撞**。

    rén-cháo   hé   shēng-làng   hǎo-xiàng shì bèi-xiāng-jīng-jī-huó-de
    people-tide   and sound-wave   seemingly is BEI-perfume-activate-NOM

    hé-ěr-měng   sìchù   **chōng-zhuàng**.
    hormone   everywhere   **bump**

    People and the sound are bumping into everything like the hormone that is activated by the perfume.

(4-150) 梦里常掉进一眼枯井，井壁又高又滑，喊声在井里嗡嗡**碰撞**而已，没人能听见。

    mèng-lǐ cháng   diào-jìn   yī-yǎn   kū-jǐng,   jǐng-bì   yòu-gāo-
    dream-in often   fall-into   one-CL   dry-well   well-wall   high-

    yòu-huá, hǎn-shēng zài-jǐng-lǐ   wēng-wēng   **pèng-zhuàng** ér-yǐ,
    slippery yell   in-well   humming   **bump**   just

    méi-rén néng tīng-jiàn.
    no-one can hear

    In dreams (I) often fall into a dry well, the wall of which is high and slippery. My yell can only bump against the wall of the well, and no one can hear me.

(4-151) 随着**刺耳**的响声，从巴黎带来的一块黄铜铭牌固定就位。

    suí-zhe **cì-ěr**-de   xiǎng-shēng,   cóng-bā-lí dài-lái-de
    with **stab-ear**-NOM sound   from-Paris bring-come-NOM

    yíkuài huáng-tóng   míng-pái   gùdìng-jiù-wèi.
    one-CL brass   nameplate fix-into-its-place

    With a harsh sound, the brass nameplate brought from Paris was fixed.

4.4.3 Olfactory paths

An olfactory path is one type of sensory paths that describes olfactory sensations as the travelling of smell. In biology, the olfactory sensation is caused by the movement and impingement of odorant molecules onto olfactory receptors. In language, we describe the olfactory sensation in terms of the fictive movement on the part of smell. However, the movement of odour molecules measured by scientists is different from the movement of the smell described by language in daily life. The movement of olfactory molecules cannot be perceived by human organs, but we still conceptualize the smell as moving into the nose.

This suggests that the dynamic linguistic expressions about smell are the result of cognitive construal rather than direct perception.

There are 121 sentences identified from the data source that express olfactory paths. They are analysed in terms of participants (Section 4.4.3.1), verbs (Section 4.4.3.2), and metaphors (Section 4.4.3.2).

4.4.3.1 Participants in olfactory paths

Table 4.12 below shows the participants in olfactory paths. The types of participants involved in olfactory paths are generally the same as those in auditory paths.

Table 4.12 Examples of participants in olfactory path expressions

Figure (the Experienced)		香气 (xiāng-qì; fragrance)	茶香 (chá-xiāng; tea-scent)	气味 (qìwèi; scent)	酒香 (jiǔ-xiāng; bouquet)	霉味儿 (méi-wèi-er; mustiness)
		花香 (huā-xiāng; potpourri)	异味 (yìwèi; odd-odour)	臭气 (chòu-qì; stench)	浓香 (nóng-xiāng; aroma)	桂花 (guìhuā; osmanthus)
Agent		粤菜 (yuè-cài; Cantonese-uisine)	玫瑰 (méi-guī; rose)	草原 (cǎo-yuán; prairie)	酒桶 (jiǔ-tǒng; wine-barrel)	稻田 (dào-tián; rice-field)
Ground	Source locations	厨房 (chú-fáng; kitchen)	饼店 (bǐng-diàn; pancake-shop)	酒杯 (jiǔ-bēi; wine-glass)	酒坊 (jiǔ-fāng; winery)	屋外 (wū-wài; room-outside)
	Path locations (including the Experiencer)	鼻观 (bíguān; nostril)	地面 (dìmiàn; ground)	门 (mén; door)		竹筐的缝隙 (zhú-kuāng-de-fèng-xì bamboo-basket-ASSOC-aperture)
	Goal locations (including the Experiencer)	街 (jiē; street)	公路 (gōng-lù; highway)	肺 (fèi; lung)	天 (tiān; sky)	面 (miàn; face)
	General locations	街道 (jiē-dào;	洞 (dòng; cave)	地板 (dì-bǎn;	村子 (cūn-zi;	屋宇 (wū-yǔ;

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		street)		floor)	village)	house)

The Experienced entity (various types of smell) is conceptualized as the Figure in olfactory paths, and it is the constantly encoded participant. The Experiencer serves either as the Path location or the Goal location, as demonstrated in the sentences in (4-152) and (4-153) respectively.

(4-152) 荷叶的香气杂着别的草香，隐约地**经过**我们的**鼻观**。

      h é-y è-de   xiāng-q ì   zá-zhe   bié-de   căo-xiāng, yĭn-yuē-de
      lotus-leaf-ASSOC   aroma   mix-DUR other   grass-aroma vaguely

      jīng-guò   wŏ-men-de   **bí-guān**.
      pass   our   **nose**

      The aroma of the lotus leaves and grass vaguely passed our nose.

(4-153) 一丝丝橙花的香味渐渐升腾起来，**钻入**我的**鼻子**。

      yī-sī-sī ch éng-huā-de   xiāng-w èi jiàn-jiàn shēng-téng-qĭ-lái,
      one-CL   orange-blossom-ASSOC   aroma   gradually rise-up

      zuàn-rù wŏ-de   **bí-zi**.
      go-into my   **nose**

      The aroma of the orange blossom gradually rises and goes into my nose.

The Agent as listed in the table refers to either the producer of the smell or the wind that are capable of influencing the travel of smell. The following sentences in (4-154) and (4-155) illustrate the involvement of the Agent. In (4-154), the noun phrase 微风 (*wēi-fēng*; breeze) acts as the Agent that sends the smell to the backgrounded Experiencer. In (4-155), the producer of the smell is described as the Agent that emits the smell.

(4-154) **微风**过处，**送来**缕缕清香。

      wēi-fēng-guò-chù, **sòng-lái** lǚ-lǚ   qīng-xiāng.
      breeze-pass-place **send-come** CL-CL   faint-scent

      (When) the breeze passes, it sends faint scent.

(4-155) ……**香橼花**在**喷射出**它的香气来。

      …**xiāng-chuán-huā** zài **pēn-shè-chū** tā-de xiāng-qì lái.
      lime-flower   DUR **spray-out**   its   aroma   come

      The lime flowers are spraying out their aroma.

Similar to auditory path sentences, the Experiencer is not indispensable for olfactory path sentences due to its inactivity. The sentence in (4-156) illustrates the case where the

Experiencer is absent from the sentence. In (4-156), the movement of the smell is described with respect to the Source location after 从 (*cóng*; from).

(4-156) 几阵臭气，从卖大碗面条与肉包子的**棚子里出来**。

> jǐ-zhèn   chòu-qì, **cóng** mài-dà-wǎn-miàn-tiáo-yǔ-ròu-bāo-zi-de-**péng-zi-lǐ**
> several-CL stench   **from** sell-noodle-and-bun-NOM-**stall-in**
>
> **chū-lái**.
> **exit-come**
>
> The stench comes from the stall that sells noodle and bun.

The movement of the smell is characterized by the Source location, Path location, Goal location, and General location. In contrary to auditory paths, the encoding frequency of the Source location is similar to that of the General location. The General location 空气 (*kōng-qì* air) in (4-157) specifies the location within which the smell moves.

(4-157) 传说镇上的**空气中**永远**飘散**着奶酪的浓香。

> chuán-shuō zhèn-shàng-de   **kōng-qì-zhōng** yǒng-yuǎn **piāo-sàn-**
> it-is-said town-on-ASSOC   **air-in**   always   **float-scatter-**
>
> zhe   nǎi-lào-de   nóng-xiāng.
> DUR   cheese-ASSOC   aroma
>
> It is said that the aroma of the cheese is always wafting in the air of the town.

4.4.3.2 *Verbs and metaphors in olfactory paths*

The verbs used in olfactory path sentences are categorized based on the kind of semantic information encoded. The verbs and the conceptual metaphors in olfactory paths are described together in this section. Table 4.13 shows typical verbs employed in olfactory paths and their categorization.

Table 4.13 Examples of verbs in olfactory path expressionss

general motion verbs (4.6%)		传 (*chuán*; *s*pread)	铺 (*pū*; spread)	漫延 (*màn-yán*; pervade)	蔓延 (*màn-yán*; spread)	
path verbs (21.4%)		出来 (*chū-lái*; exit-come)	经过 (*jīng-guò*; pass)	缭绕 (*liáo-rào*; coil-up)	升腾 (*shēng-téng*; rise)	散 (*sàn*; scatter)
manner verbs (74.0%)	**smell verbs (default verbs)** (16.0%)	发 (*fā*; send)	弥漫 (*mí-màn*; suffuse)	散发 (*sàn-fā*; emit)	弥散 (*mí-sàn*; diffuse)	

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	wind verbs (22.9%)	吹弄 (*chuī-nòng*; blow)	吹送 (*chuī-sòng*; blow-send)	飘 (*piāo*; flutter)	飘扬 (*piāo-yáng*; wave)	飘荡 (*piāo-dàng*; waft)
	liquid verbs (10.7%)	荡漾 (*dàng-yàng*; ripple)	喷射 (*pēn-shè*; spray)	滋 (*zī*; spurt)	溢 (*yì* overflow)	漂浮 (*piāo-fú*, float [on water])
	animal verbs (5.3%)	送 (*sòng*; see-off)	推 (*tuī*; push)	窜 (*cuàn*; spurt)	蹿 (*cuān*; spring)	钻 (*zuān*; penetrate)
	force verbs (16.8%)	冲 (*chōng*; rush)	冲撞 (*chōng-zhuàng*; collide)	袭 (*xí* attack)	扑鼻 (*pū-bí* pounce-nose)	扑面 (*pū-miàn*; pounce-face)
	miscellany (2.3%)	挡 (*dǎng*; block)		回荡 (*huí-dàng*; reverberate)		释放 (*shì-fàng*; release)

The categories of verbs employed to modify olfactory paths are quite similar to the ones employed to modify auditory paths. They include general motion verbs, paths verbs, and manner verbs. General motion verbs in olfactory path sentences express the movement of the smell without explaining particular path or manner information. There are usually other linguistic elements that encode the path information, as shown by the verb complement 开来 (*kāi-lái;* open-come) in (4-158).

(4-158) 烤肉特有的焦香**蔓延开来**。

kǎo-ròu   tè-yǒu-de   jiāo-xiāng   **màn-yán-kāi-lái**.
barbecue   typical   aroma   **spread-open-come**

The typical aroma of barbecue spreads out.

Path verbs specify the path of the movement of the smell. Path verbs can encode various types of path information, such as upward movement as in (4-159), outward movement as in (4-160), inward movement as in (4-161), and traverse as in (4-162).

(4-159) 一丝丝橙花的香味渐渐**升腾起来**，钻入我的鼻子。

yī-sī-sī   chéng-huā-de   xiāng-wèi   jiàn-jiàn   **shēng-téng-qǐ-lái**,
one-CL   orange-blossom-ASSOC   aroma   gradually   **rise-up**

zuān-rù   wǒ-de   bí-zi.
go-into   my   nose

The aroma of the orange blossom gradually rises and goes into my nose.

(4-160) 几阵臭气，从卖大碗面条与肉包子的棚子里出来。

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jǐ-zhèn   chòu-qì, cóng mài-dà-wǎn-miàn-tiáo-yǔ-ròu-bāo-zi-de-péng-zi-lǐ
several-CL   stench   from sell-noodle-and-bun-NOM-stall-in

chū-lái.
exit-come

The stench comes from the stall that sells noodle and bun.

(4-161) 深吸一口气，空气中泥土混合海水的香气直**入到**肺里。

shēn-xī   yì-kǒu   qì,   kōng-qì-zhōng   ní-tǔ-hùn-hé-hǎi-shuǐ-de
deep-inhale   one-CL   breath   air-in   soil-mix-seawater-NOM

xiāng-qì   zhí   **rù-dào**   fèi-lǐ.
aroma   directly   **enter-to** lung-in

(I) took a deep breath, and the aroma of soil and seawater in the air entered (my) lung.

(4-162) 荷叶的香气杂着别的草香，隐约地**经过**我们的鼻观。

hé-yè-de   xiāng-qì zá-zhe   bié-de   cǎo-xiāng,   yǐn-yuē-de
lotus-leaf-ASSOC   aroma   mix-DUR   other   grass-aroma vaguely

jīng-guò   wǒ-men-de   bí-guān.
pass   our   nose

The aroma of the lotus leaves and grass vaguely passed our nose.

Similar to auditory path sentences, manner verbs in olfactory path sentences can be further categorized into smell verbs, which are the default verbs to modify smell; wind verbs, which are the verbs frequently used in situations involving wind or air; liquid verbs; animals verbs; force verbs; and miscellany verbs.

Four types of smell verbs are identified, among which two describe the interaction between the producer of the smell and the smell, so the path information "outward" is usually implied in those smell verbs. In some cases the verb complement 出 (*chū*; out) is used after the smell verb to further delineate the outward path, as demonstrated in (4-163). As the most natural and plain way to express smell, smell verbs create the least degree of dynamic effect among all the verbs describing olfactory paths.

(4-163) 大门口的木方桌**散发出**淡淡的咖啡香。

dà-mén-kǒu-de   mù-fāng-zhuō   **sàn-fā-chū** dàn-dàn-de
big-door-mouth-ASSOC   wooden-square-table **emit-out**   light

kā-fēi-xiāng.
coffee-aroma

The wooden square table at the big door emits the light aroma of the coffee.

The other two smell verbs describe the diffusing of the smell, as shown in the example in (4-164). The verb 弥漫 (míman; suffuse) in (4-164) is classified as a smell verb because the entity it modifies is usually smell or fog.

(4-164) 车队进入森林路段，空气中**弥漫**着松木的味道。

chē-duì	jìn-rù	sēn-lín-lù-duàn,	kōng-qì-zhōng	**míman**-zhe
motorcade	enter-into	forest-road-section	air-in	**suffuse**-DUR

sōng-mù-de   wèi-dào.
pine-ASSOC   odour

The motorcade entered the road in the forest, and the odour of pines pervaded the air in the forest.

Over 22% of the verbs employed in olfactory path sentences are verbs associated with wind. The close relationship between wind and smell at the linguistic level is probably experience-based. It is straightforward for us to form the intuition that wind is helpful in transferring odours because the odours frequently come along with the wind. The wind or air is either encoded explicitly or indicated in the context. The sentence in (4-165) expresses the interaction between wind and smell by encoding the wind as the Agent. The sentence in (4-166) encodes the air as a General location where the odour is wafting. The wind or air is implicit in the sentence in (4-167).

(4-165) **清风吹送**着月桂的芳香。

qīng-fēng	**chuī-sòng**-zhe	yuè-guì-de	fāng-xiāng.
breeze	**blow-send**-DUR	laurel-ASSOC	scent

The breeze wafts the scent of the laurel.

(4-166) 传说镇上的**空气**中永远**飘散**着奶酪的浓香。

chuán-shuō	zhèn-shàng-de	**kōng-qì**-zhōng	yǒng-yuǎn	**piāo-sàn**-
it-is-said	town-on-ASSOC	**air**-in	always	**float-scatter**-

zhe   nǎi-lào-de   nóng-xiāng.
DUR   cheese-ASSOC   aroma

It is said that the aroma of the cheese is always wafting in the air of the town.

(4-167) 走在街上，众多饼店里**飘出**的新出炉的饼香......

zǒu	zài-jiē-shàng,	zhòng-duō	bǐng-diàn-lǐ	**piāo-chū**-de
walk	ZAI-street-on	many	pie-shop-in	**float-out**-NOM

xīn-chū-lú-de   bǐng-xiāng...
new-exit-oven-NOM   pie-flavour

(I) walked on the street, and the flavour of the pies floating out from many pie shops……

The liquid verbs, animal verbs, and force verbs will be discussed from the perspective of metaphors. The smell is conceptualized as liquid in some cases under the metaphoric mapping SMELL IS LIQUID. Linguistically, terms in the domain of liquid are employed to describe the movement of smell. The sentences from (4-168) to (4-171) are about olfactory events described with liquid terms.

(4-168) 我独自散步在林丛中，渐渐发现总有一股淡淡的幽香在清新的空气中**荡漾**……

  wǒ dú-zì sàn-bù zài-lín-cóng-zhōng, jiàn-jiàn fā-xiàn zǒng yǒu
  I alone walk ZAI-forest-in   gradually find always have

  yī-gǔ dàn-dàn-de yōu-xiāng zài-qīng-xīn-de-kōng-qì zhōng **dàng-yàng**…
  one-CL indistinct aroma ZAI-fresh-air-in   **waft**

  I walked alone in the forest and found that there was always some indistinct aroma wafting in the fresh air.

(4-169) ……香橼花在**喷射出**它的香气**来**。

  …xiāng-chuán-huā zài **pēn-shè-chū** tā-de xiāng-qì **lái**.
  lime-flower   DUR **spray-out** its aroma **come**

  The lime flowers are spraying out their aroma.

(4-170) 芳草清香**四溢**。

  fāng-cǎo qīng-xiāng **sì-yì**.
  green-grass faint-scent **overflow**

  The faint scent of the green grass wafts along.

(4-171) 晴朗的冬日早晨暗香**浮动**，寻香看去，原来是梅花……

  qíng-lǎng-de dōng-rì zǎo-chén àn-xiāng **fú-dòng**,
  sunny   winter morning hidden-aroma **float-move**

  xún xiān kàn-qù, yuán-lái-shì méi-huā…
  follow aroma look-go turn-out-to-be plum-blossom

  Some indistinct aroma floated in the sunny morning in winter. (I) turned my eyes to follow the aroma, and it turned out to be plum blossoms.

The domain of animal is another domain from which terms are borrowed to depict olfactory events. Verbs that typically describe the motion of animals are used to characterize the fictive movement of smell, as illustrated by the sentences from (4-172) to (4-174). In these sentences, smell is the active participant that is conceptualized as an animal. This way of conceptualization is motivated by the metaphoric mapping SMELL IS AN ANIMAL.

(4-172) 香氛留存持久，有小苍兰、月桂的香气一次**窜出来**。

  xiāng-fēn liú-cún chí-jiǔ, yǒu xiǎo-cāng-lán, yuè-guì de

perfume last long have freesia laurel-ASSOC

xiāng-qì yìcì **cuàn-chū-lái**.
aroma one-time **pop-out**

The perfume lasts long. The aroma of freesia and laurel pop out at the same time.

(4-173) 新酒还焖在热乎乎的锅灶上，酒酿的香气早就**蹿出**了酒坊。

xīn-jiǔ hái mèn zài-rè-hū-hū-de-guō-zào-shàng, jiǔ-niàng-de-
new-wine still simmer ZAI-hot-stove-on wine-

xiāng-qì zǎo-jiù **cuān-chū**-le jiǔ-fāng.
aroma already **jump-out**-PFV winery

The new wine is still simmering on the hot stove, (but) its aroma has already jumped out of the winery.

(4-174) 美食的香味也**推开**了隔壁人家的门。

měi-shí-de xiāng-wèi yě **tuī-kāi**-le gé-bì-rén-jiā-de mén.
delicious-food-ASSOC flavour also **push-open**-PFV neighbour's door

The flavour of the delicious food also pushed the neighbour's door open.

The last metaphoric mapping underlying some olfactory path expressions is SMELL IS A FORCEFUL ENTITY. In the following sentences from (4-175) to (4-178), smell is conceptualized as a moving entity with some momentum. Different smells can even clash into each other as the sentence in (4-176) describes.

(4-175) 瞬时，一股辛香**袭来**，味蕾的细胞被完全打开。

shùn-shí yī-gǔ xīn-xiāng **xí-lái**, wèi-lěi-de xì-bāo
suddenly one-CL spicy-flavour **sweep-come** taste-bud-ASSOC cell

bèi wán-quán dǎ-kāi.
BEI completely open

Suddenly some spicy flavour swept over, and the cells of the taste buds were opened completely.

(4-176) 阿拉伯咖啡、胡椒、桂皮、石竹花、茴香的味道与炸鸡店飘出的味道一起，在街道上**冲撞**。

ā-lā-bó kā-fēi, hú-jiāo, guì-pí shízhú-huā, huí-xiāng-de
Arabic coffee pepper cinnamon pink fennel-ASSOC

wèi-dào yǔ zhá-jī-diàn piāo-chū-de wèi-dào yì-qǐ,
odour with fried-chicken-shop float-out-NOM flavour together

zài-jiē-dào-shàng **chōng-zhuàng**.
ZAI-street-on **clash**

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The odour of Arabic coffee, pepper, cinnamon, pink, and fennel together with the flavour that floated out from the shop selling fried chicken clashed against each other on the street.

(4-177) 刚出炉的披萨香味**扑鼻**。

gāng-chū-lú-de   pī-sà   xiāng-wèi   **pū-bí**
just-exit-oven-NOM   pizza   odour   **rush-at-nose**

The odour of the fresh pizza goes into the nose.

(4-178) 夏天有了一些水了，可是臭气**冲**天。

xià-tiān yǒu-le   yì-xiē shuǐ   le, kě-shì   chòu-qì   **chōng**-tiān.
summer have-PFV   some water   CRS but   stench   **shoot-up-to**-sky

There is some water (in the river) in summer, but the stench (of the water) shoots up into the sky.

Verbs in the miscellany group are difficult to be categorized. One example is the verb 回荡

(*huídàng*; reverberate) as shown below.

(4-179) 悠扬的乐声中弥漫着花草的芬芳，在晚风中飘逸、**回荡**。

yōu-yáng-de   yuè-shēng-zhōng mímàn-zhe   huā-cǎo-de   fēn-fāng,
melodious   music-in   waft-DUR   flower-grass-ASSOC   fragrance

zài-wǎn-fēng-zhōng   piāo-yì，   **huídàng**.
ZAI-night-breeze-in   float   **reverberate**

The fragrance of the flowers and grass wafted in the melodious music, which floated and reverberated in the breeze at night.

4.4.4 The directionality in sensory paths

The most prominent difference of the three types of sensory paths is the directionality of the fictive motion. It is possible for visual perception to be conceptualized as bidirectional, whereas auditory and olfactory perceptions tend to be encoded with the fictive motion only from the Experienced to the Experiencer. Talmy explains the directionality in emanation paths in terms of the active-determinative principle (Talmy, 2000a, p. 117), which is, "the object that is taken to be the more active or determinative of the two is conceptualized as the Source of the emanation" (ibid). He then goes one step further in attributing the basis of this principle to the "agency" performed by individuals (Talmy, 2000a, p. 119). The agency pattern is exhibited by the agentive sensory paths, in which the Experiencer, as an active and determinative Agent, sends out a fictive line of sight to the distal Experienced, and thus the Experiencer is the Source of the emanation path (Talmy, 2000a, pp. 120-121). The pattern of the agentive sensory path serves as the model for several other types of emanation paths. But

as Talmy (2000a, p. 122) notes, the sensory fictive motion from the Experienced to the Experiencer cannot be explained directly by this pattern and requires further explanation. Thus two interrelated issues need to be addressed, i.e., the reason of the differences among the three principal types of sensory paths with regard to the directionality of fictive motion and the experiential basis of the Experienced being more active and determinant.

The difference of directionality for the three types of sensory paths can be explained by the features of the Experiencer and the Experienced respectively. The first difference is that the perceptual organs are controlled in different ways. We have more control over visual experience simply through turning the eyes, the head, and the ability to close and open the eyes, whereas the manipulation of the ears and nose is more difficult and requires extra effort particularly when we do not want some auditory or olfactory experience. Unlike the eyes, the ears and the nose cannot be closed without the help of other entities. The different degrees of controlling force that can be applied to the perception organs may motivate the encoding of the eyes as the Agent but not the ears and nose. Another difference lies in the features of the Experienced of the three modalities, which can be summarised into at least three points. First, the Experienced in visual paths tend to be concrete entities with a physically tangible form, while the Experienced in the auditory and olfactory paths are intangible entities produced by some objects. Second, the existence of the visually perceived object in the world tends to be relatively stable and last longer than that of the auditorily or olfactorily perceived entity that usually exists for a relatively shorter time span and vanishes soon. Third, normally the visual Experienced entity that provides meaningful information is always available as long as the eyes are opened, but the meaningful auditory or olfactory Experienced entity depends not only on the ears and nose, but also the producer of the Experienced entity and an appropriate environment. This is consistent with the fact that the largest proportion of information for human beings is gained visually. To sum up the features of the Experienced entities in the three perceptual domains, the visual Experienced entities tend to be more tangible, stable, and ubiquitous, whereas the auditory and olfactory Experienced entities tend to be more intangible, transient, and environment-specific. We are more passive in perceiving sound and smell than visual entities. Thus, it is possible and natural for the eyes to act as the Agent of the visual Experienced entity, but intentionally directing the auditory and olfactory organs in order to detect a stimulus may or may not succeed because the existence of the target sound and smell depends mainly on the producer and the medium.

The reasons motivating the directionality of the three sensory paths discussed above partly explained why in some cases the Experienced entity is conceptualized as more active and determinative than the Experiencer. In auditory and olfactory paths, the perception events depend more on the producer of the Experienced entity and the medium carrying it than on the Experiencer, and the Experiencer frequently serves as the passive receptor of the Experienced entity. In this sense, the Experienced entity is more active and determinant than the Experiencer. The situation is slightly more complicated for visual paths. Although it is experientially plausible for the eyes to be conceptualized as more active and determinative, it is not impossible for the visually Experienced entities to be experienced as the more active and determinative participant, especially in cases where the eyes receive the light unintentionally or unexpectedly from the Experienced entity. One case is when we see something novel or unexpected (such as in a new country or on a moving car), it is natural to conceptualize the perception event as coming from the Experienced entity to the Experiencer. Many people also have the experience of being awakened by the sunshine in the morning, in which case it can be odd to describe the visual path as from the eyes to the sun because the sunlight is the cause. Another case more appropriate to be depicted by the fictive motion from the Experienced entity to the eyes is when the eyes are dazzled by strong light, such as the sun or the flashlight. The interaction between the light and the eyes involves both visual paths and radiation paths.

CHAPTER 5   ADVENT PATHS, FRAME-RELATIVE MOTION, PATTERN PATHS, AND ACCESS PATHS

Following the analysis of coextension paths and emanation paths, this chapter presents the descriptive analysis of the remaning four types of fictive motion in Modern Standard Chinese, namely, advent paths, frame-relative motion, pattern paths, and access paths.

5.1 Advent Paths

Advent paths describe "a stationary object's location in terms of its arrival or manifestation at the site it occupies" (Talmy, 2000a, p. 134). Talmy (2000a, p. 135) distinguishes two types of advent paths, i.e., site arrival and site manifestation, as shown in the sentences in (5-1) and (5-2) respectively. Site arrival is considered as fictive motion whereas site manifestation is regarded as fictive change. In this section the term *advent path* only refers to site arrival, and fictive change will not be discussed. Advent paths are analyzed in terms of participants (Section 5.1.1) and verbs (Section 5.1.2).

(5-1)   The palm trees clustered together around the oasis.

(5-2)   This rock formation shows up near volcanoes.

5.1.1 Participants in advent paths

There are 136 examples identified in the data as advent path sentences. Table 5.1 below illustrates the typical participants involved in advent paths. The Figures in advent path expressions are described as moving from one place to its current location. The types of Figures depicted in advent path sentences from the data generally include plants, geographical phenomena, and architectural structures. The types of Figures may be enriched by adding more text genres, which is probably a rather laborious job because advent path expressions are scarce.

Table 5.1   Examples of participants in advent path expressions

Figure	**plants**	古松 (*gǔ-sōng*; ancient-pine)	野花 (*yě-huā*; wild-flower)	枯藤 (*kū-téng*; dead-branch)	映山红 (*yìng-shān-hóng*; azalea)	树冠 (*shù-guān*; crown)
	geographical	山峰	岩石	冰川	湿地	群岛

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	phenomena	(*shān-fēng*; mountain-peak)	(*yán-shí*, rock)	(*bīng-chuān*; glacier)	(*shī-dì*, wetland)	(*qún-dǎo*; islands)
	archectectural structures	摊位 (*tān-wèi*; stall)	街市 (*jiē-shì*; street-market)	桥亭 (*qiáo-tíng*; bridge-pavilion)	石墙 (*shí qiáng*; stone-wall)	街道 (*jiē-dào*; street)
Ground	**Source locations**	地 (*dì*, ground)	天 (*tiān*; sky)	松林 (*sōng-lín*; pinewood)	水面 (*shuǐ-miàn*; water-surface)	花园 (*huā-yuán*; garden)
	Path locations	大海 (*dà-hǎi*; sea)		街 (*jiē*; street)	山体 (*shān-tǐ*; mountain)	
	Goal locations	山腰 (*shān-yāo*; mountain-waist)	蓝天 (*lán-tiān*; blue-sky)	港岛 (*gǎng-dǎo*; Harbor-island)	山海关 (*shān-hǎi-guān*; Shanhai-Pass)	地 (*dì*, ground)
	General locations	天空 (*tiān-kōng*; sky)	草地 (*cǎo-dì*, grassland)	银河 (*yín-hé*, Milky-Way)	白沙 (*bái-shā*; white-sand)	眼前 (*yǎn-qián*; eye-front)

The Ground of the fictive movement is either absent, as demonstrated in the sentence in (5-3), or present. When the Ground is present, it can be either the Source location, as shown in the sentence in (5-4); or the Path location, as in (5-5); or the Goal location, as demonstrated in the sentence in (5-6); or just some General location, as illustrated in (5-7).

(5-3)   我到那个教堂的工程现场整整看了一天。可以想象，即使从飞机上看，这也是让人惊骇的图像。周围是密密麻麻的整齐街道，到了这里突然**散开**，为它**让路**。

wǒ   dào   nà-ge   jiào-táng-de   gōng-chéng   xiàn-chǎng
I   go-to that-CL   church-ASSOC   construction   site

zhěng-zhěng   kàn-le   yì-tiān.   kě-yǐ   xiǎng-xiàng,   jíshǐ
as-long-as   observe-PFV   one-day   can   imagine   even-if

cóng-fēi-jī-shàng   kàn, zhè yě   shì   ràng rén   jīng-hài-de
from-airplane-on   look this also is   let   people   amazed

tú-xiàng.   zhōu-wéi   shì   mìm ìmámá-de   zhěng-qí jiē-dào,
image   around   is   crowded   neat   street

dào-le   zhè-lǐ   tū-rán   **sàn-kāi,**   wèi-tā   **ràng-lù.**
arrive-PFV   here   suddenly **scatter-open** for-it   **give-way**

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I went to the construction site of the church and observed for a whole day. (I) can imagine that this is an amazing image even being observed from the airplane. The crowded but neat streets around (the church) scatter suddenly when arriving here to give way to the church.

(5-4) 兴冲冲踏入灵隐山里，踩倒遍地筷子般直立着……的山蕨菜，才见一丛丛如火如血的映山红**从山腰**的**松林下冒出来**。

xīng-chōng-chōng   tà-rù   líng-yǐn-shān-lǐ,   cǎi-dǎo   biàn-dì
gladly   step-into   Lingyin-Mountain-in   stamp-down   whole-ground

kuài-zi-bān   zhílìzhe…-de   shān-juécài,   cái   jiàn   yī-cóng-cóng
chopstick-like   stand-DUR-NOM   fern   then   see   one-CL-CL

rú-huǒ-rú-xiě-de   yìng-shān-hóng   **cóng**-shān-yāo-de-
as-fire-as-blood-NOM   azalea   **from**-mountainside-ASSOC-

sōng-lín-xià   **mào-chū-lái**.
pinewood-below   **pop-out-come**

(I) stepped into Lingyin Mountain gladly. After stamping down the ferns that were standing like chopsticks, I saw many blood-red azaleas popping out from the pinewood on the mountainside.

(5-5) 诺托的城中心，是 Vittorio Emanuele 大街，**沿街一路排开**的无论是普通民宅、贵族居所、政府机构，还是一个又一个的教堂，都有鲜明的巴洛克印记。

nuò-tuō-de   chéng-zhōng-xīn,   shì   Vittorio-Emanuele-dà-jiē,
Noto-ASSOC   city-center   is   Vittorio-Emanuele-Street

yán   **jiē**   **yílù**   **pái-kāi**-de   wú-lùn   shì
along   **street**   **all-the-way**   **arrange-open**-NOM   whether   is

pǔ-tōng-mín-zhái,   guìzú-jū-suǒ,   zhèng-fǔ-jī-gòu,   hái-shì
normal-house   noble-villa   government-building   or

yī-gè-yòu-yī-gè-de   jiào-táng,   dōu   yǒu   xiān-míng-de   bā-luò-kè
one-after-another   church   all   have   vivid   baroque

yìn-jì
style

Vittorio Emanuele Street is at the center of Noto. The constructions lining the street, whether they are normal houses, noble villas, or churches one after another, all exhibit baroque style.

(5-6) 在这一幅天然景物中，只有一座灯塔式的建筑物，丑陋不堪，十分碍目，**落在西子湖上**。

zài-zhè-yī-fú-tiān-rán-jǐng-wù-zhōng,   zhǐ   yǒu   yī-zuò   dēng-tǎ-shìde
ZAI-this-one-CL-natural-scenery-in   only   have   one-CL   lighthouse-like

jiàn-zhù-wù,   chǒu-lòu-bù-kān,   shífēn-ài-mù,   **luò**
building   very-ugly   unpleasant-to-see   **fall**

zài-xī-zǐ-hú-shàng.
ZAI-West-Lake-on

In this natural scenery, there is only a building similar to a lighthouse, which is very ugly and unpleasant to see, falling onto the West Lake.

(5-7) 草地上由近及远地缓缓升起数座火山锥。

cǎo-dì-shàng yóu-jìn-jíyuǎn-de huǎn-huǎn **shēng-qǐ**
grassland-on from-the-near-to-the-distant slowly **rise-up**

shù-zuò huǒ-shān-zhuī.
several-CL volcanic-cone

Several volcanic cones rise slowly on the grassland from the near to the distant.

5.1.2 Verbs in advent paths

The verbs in advent paths can generally be grouped into general motion verbs, path verbs, and manner verbs, as illustrated in Table 5.2. General motion verbs account for 23.1% of all the verbs used in advent paths. This high percentage is largely attributed to the employment of the verb 排 (*pái*; put-in-order), which occurs ten times; and its expanded form 排列 (*pái-liè*, put-in-order), which appears eight times. In the sentence in (5-8), the groups of mountain ranges are conceptualized as having been put in order from one end to the other to arrive at their current sites. The same is true for the sentence in (5-9), in which the group of islands is described as having been arranged to their current locations from northeast to southwest. Another general motion verb is 展 (*zhǎn*; spread-out/unfold), as shown in the sentence in (5-10). The dynamic effects created by 排 (*pái*; put-in-order) and 展 (*zhǎn*; spread-out/unfold) are similar. In (5-10), the volcanoes, valleys, and mountains are conceptualized as having experienced the process of spreading out before arriving at the current locations, but the second clause indicates the transfer from the dynamic conceptualization to the stationary conceptualization.

(5-8) 翌日清晨，我早早守候在观景台上……远方影影绰绰的梅里十三峰依次排开。

yìrì qīng-chén, wǒ zǎo-zǎo shǒu-hòu zài-guān-jǐng-tái-shàng…
next-day morning I very-early wait ZAI-viewing-deck-on

yuǎn-fāng yǐng-yǐng-chuò-chuò-de méi-lǐ-shísān-fēng yī-cì
in-the-distance looming Meili-13-Mountain-Peak in-order

pái-kāi.
arrange-open

I was waiting very early on the viewing deck the next morning. The looming Thirteen Peaks of Meili Mountain in the distance lined up in order.

(5-9) 从地图上望去，舟山群岛呈东北------西南向排列。

cóng-dìtú-shàng wàng-qù, zhōu-shān-qún-dǎo chéng

from-map-on　　　look-go　Zhoushan-Islands　　　present

dōng-běi-xī-nán-xiàng　　**pái-liè**
northeast-southwest　　　**arrange**

Zhoushan Islands are arranged from northeast to southwest on the map.

(5-10) 极目远眺，锥形火山、山谷、山峦依次**展开**，静静地屹立千年。

jímù-yuǎn-tiào,　　　　　　zhuī-xíng-huǒ-shān,　shān-gǔ,　shān-luán
extremely-eye-faraway-look　conical-volcano　　　valley　　mountain

yī-cì　**zhǎn-kāi**, jìng-jìng-de　　　yìlì　　qiān-nián.
in-order **unfold**　quietly　　　　stand　　thousand-year

(I) looked into the utmost distance (and saw that) the conical volcanoes, valleys, and mountains, which have stood quietly for thousands of years, unfold in order.

Table 5.2　Examples of verbs in advent path expressions

general motion verbs (23.1%)		伸 (*shēn*; extend)	分布 (*fēn-bù*; distribute)	铺展 (*pū-zhǎn*; stretch)	排列 (*pái-liè*; arrange-in-order)	中断 (*zhōng-duàn*; break-off)	铺 (*pū*; spread)
path verbs (40.4%)		下陷 (*xià-xiàn*; sink)	倾斜 (*qīng-xié*, tilt)	升 (*shēng*; ascend)	围绕 (*wéi-rào*; surround)	弯 (*wān*; bend)	掉 (*diào*; drop)
		退 (*tuì*; step-back)	散 (*sàn*; scatter)	收 (*shōu*; withdraw)	放射 (*fàng-shè*; radiate)	盘旋 (*pán-xuán*; circle-around)	来 (*lái*; come)
manner verbs (36.5%)	liquid verbs (5.1%)	涌 (*yǒng*; gush)	洒 (*sǎ*; spill)	浮 (*fú*, float)	浸 (*jìn*; immerse)	浸渍 (*jìn-zì* soak)	
	animal verbs (11.5%)	跑 (*pǎo*; run)	爬 (*pá*, climb)	扑 (*pū*; throw-oneself-on)	拦 (*lán*; block)	让 (*ràng*; give-way)	跳 (*tiào*; jump)
	force verbs (8.3%)	甩 (*shuǎi*; swing)	抛 (*pāo*; throw)	劈 (*pī*; break)	刺 (*cì*; stab)	托 (*tuō*; support-from-under)	切 (*qiē*; cut)
	miscellany (11.5%)	冒 (*mào*; pop)	划 (*huá*, sweep)	卷 (*juǎn*; roll)	生 (*shēng*; grow)	虬 (*qiú*, curl)	醋 (*cù*, vinegar)

There are 40.4% path verbs that occur in advent paths. Forty-three types of path verbs are identified, and most of them just occur once. The verb 散落 (*sàn-luò*, scatter) occurres six

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times. As illustrated in the sentence in (5-11), the snack shops on one street are conceptualized as scattering along the street. The verb 散落 (*sàn-luò*, scatter) describes the shops as moving from somewhere and being distributed on the street. The verb 落 (*luò*, drop), which is observed four times, is shown in (5-12). In this sentence, the building located at the West Lake is linguistically described as having dropped down onto the West Lake. The verb 落 (*luò*, drop) is also used in the noun phrase 落地窗 (*luò-dìchuāng*; drop-ground-window) to refer to French windows, in which the window is conceptualized as having dropped onto the ground. Sentences from (5-13) to (5-16) demonstrate a few more advent path examples with path verbs. In the sentence in (5-13), the streets are stationary relative to the earth, but linguistically they are conceptualized as undergoing the process of dispersing, and an adverb 突然 (*tū-rán*; suddenly) is employed to modify the temporal aspect of the dispersion. In the sentence in (5-14), the height contrast between the mountain and the valley is conceptualized as that the stratum has fallen down, and the same adverb 突然 (*tū-rán*; suddenly) is employed to describe the sharp contrast. The situation that the sentence in (5-15) depicts is that there is a vast garden area between the gate of the house and the house, so that people who enter the gate feel that the house is still far. Linguistically, the path verb 退 (*tuì* recede) is employed to describe the fictive movement on the part of the house. In the sentence in (5-16), the volcanically cones are conceptualized as having risen up from the grassland, though they have been standing there for ages.

(5-11) 有着百年历史的中山路不失热闹、干净，许多名小吃**散落**在两旁的巷子中。

yǒu-zhe-bǎi-nián-lìshǐ-de	zhōng-shān-lù	bù-shī
have-DUR-hundred-year-history-NOM	Zhongshan-Road	not-lost

rè-nao,	gān-jìng,	xǔ-duō	míng-xiǎo-chī	**sàn-luò**
lively	neat	many	famous-snack	**scatter-fall**

zài-liǎng-páng-de-xiàng-zi-zhōng.
ZAI-two-sides-NOM-alley-in

Zhongshan Road with hundreds of years of history is lively and neat. Many famous snack restaurants scatter in the alleys on both sides of the road.

(5-12) 在这一幅天然景物中，只有一座灯塔式的建筑物，丑陋不堪，十分碍目，**落**在西子湖上。

zài-zhè-yī-fú-tiān-rán-jǐng-wù-zhōng,	zhǐ	yǒu	yī-zuò	dēng-tǎ-shìde
ZAI-this-one-CL-natural-scenery-in	only	have	one-CL	lighthouse-like

jiàn-zhù-wù,	chǒu-lòu-bù-kān,	shífēn-ài-mù,	**luò**
building	very-ugly	unpleasant-to-see	**fall**

zài-xī-zǐ-hú-shàng.
ZAI-West-Lake-on

In this natural scenery, there is only a building similar to a lighthouse, which is very ugly and unpleasant to see, falling onto the West Lake.

(5-13) 我到那个教堂的工程现场整整看了一天。可以想象，即使从飞机上看，这也是让人惊骇的图像。周围是密密麻麻的整齐街道，到了这里**突然散开**，为它**让路**。

wǒ	dào	nà-ge	jiào-táng-de	gōng-chéng	xiàn-chǎng
I	go-to	that-CL	church-ASSOC	construction	site

zhěng-zhěng	kàn-le	yì-tiān.	kě-yǐ	xiǎng-xiàng,	jíshǐ
as-long-as	observe-PFV	one-day	can	imagine	even-if

cóng-fēi-jī-shàng	kàn,	zhè	yě	shì	ràng	rén	jīng-hài-de
from-airplane-on	look	this	also	is	let	people	amazed

tú-xiàng.	zhōu-wéi	shì	mìmìmámá-de	zhěng-qí	jiē-dào,
image	around	is	crowded	neat	street

dào-le	zhè-lǐ	**tū-rán**	**sàn-kāi,**	wèi-tā	**ràng-lù.**
arrive-PFV	here	**suddenly**	**scatter-open**	for-it	**give-way**

I went to the construction site of the church and observed for a whole day. (I) can imagine that this is an amazing image even being observed from the airplane. The crowded but neat streets around (the church) scatter suddenly when arriving here to give way to the church.

(5-14) 更奇特的是，在天子山高台的中心，地层**突然下陷**，形成几十里的山谷。

gèng-qítè-de	shì	zài-tiān-zǐ-shān-gāo-tái-de-zhōng-xīn,
more-strange-NOM	is	ZAI-Tianzi-Mountain-tableland-ASSOC-center

dì-céng	**tū-rán**	**xià-xiàn,**	xíng-chéng	jǐ-shílǐ-de	shān-gǔ.
land	**suddenly**	**subside**	form	tens-of-miles	valley

What is more strange is that at the center of the tableland of Tianzi Mountain, the land subsides suddenly, forming tens of miles of valley.

(5-15) 那是一幢一眼就令人觉得森严的房子（茜茜公主故居）……远远地**退开**在花园之后，四周还有又高又密的树木围了严实。

nà	shì	yī-zhuàng	yī-yǎn-jiù	lìng rén	jué-de	sēn-yán-de
that	is	one-CL	one-sight	make people	feel	heavily-guarded

fáng-zi	(xī-xī-gōng-zhǔ-gù-jū)…	yuǎn-yuǎn-de	**tuì-kāi**
house	Sissi-Princess-former-residence	remotely	**withdraw-open**

zài-huā-yuán-zhī-hòu,	sì-zhōu	hái	yǒu	yòu-gāo-yòu-mì-de	shù-mù
ZAI-garden-behind	around	also	have	tall-and-dense	tree

wéi-le	yán-shí
surround-PFV	tight

That (the former residence of Princess Sissi) is a house that makes you feel that it is heavily guarded once it is seen. It draws way back behind the garden, and there are tall and dense trees surrounding it tightly.

(5-16) 草地上由近及远地缓缓**升起**数座火山锥。

cǎo-dì-shàng	yóu-jìn-jíyuǎn-de	huǎn-huǎn	**shēng-qǐ**
grassland-on	from-the-near-to-the-distant	slowly	**rise-up**

shù-zuò	huǒ-shān-zhuī.
several-CL	volcanic-cone

Several volcanic cones rise slowly on the grassland from the near to the distant.

Manner verbs account for a relatively high proportion (36.5%) for advent path expressions. They are further grouped into liquid verbs, animal verbs, force verbs, and miscellany verbs, and these four types of verbs are illustrated one by one below.

The Figures in advent paths are sometimes conceptualized as animals, as shown in the sentences in (5-17) and (5-18) below, and (5-13) above. As discussed earlier, the streets in (5-13) are conceptualized as dispersing suddenly. In the last clause of (5-13), the streets are described as animals that make way for the church. In the sentence in (5-17), the flower patterns on the paintings are stationary, but they are described as animals that climb to every place the eyes can see. In the sentence in (5-18), the land that administratively belongs to Heilingjiang Province but geographically is located at Inner Mongolia is conceptualized as running from Heilongjiang to Inner Mongolia.

(5-17) 家并不算十分大，但这并不妨碍我们爱上它那些怒放的花儿图案——花儿们慵懒地**伸个懒腰**，就在不经意间**爬上**了几乎所有目光所及之处。

jiā	bìng-bù-suàn	shífēn-dà,	dàn	zhè	bìng-bù	fáng-ài
house	not	very-big	but	this	not	prevent

wǒ-men	ài-shàng	tā	nà-xiē	nù-fàng-de	huā-er-túàn------
us	love	its	those	blossoming	flower-pattern

huā-er-men	yōng-lǎn-de	**shēn-gèlǎn-yāo,**	jiù	zài-bù-jīng-yìjiān
flowers	lazily	**stretch**	then	incidentally

páshàng-le	jī-hū	suǒ-yǒu	mù-guāng-suǒ-jízhī-chù.
climb-up-PFV	almost	all	sight-arrive-NOM-place

The house is not very big, but this doesn't prevent us from falling in love with the patterns of blossoming flowers in it. The flowers are stretching lazily, and then they incidentally climb everywhere we look.

(5-18) 中国也有很多不那么标准的飞地。例如，黑龙江省……的加格达奇区，竟然没在黑龙江省，而**跑到**了内蒙古自治区……

zhōng-guó	yě	yǒu	hěn-duō	bù-nàme	biāo-zhǔn-de

| China | also | have | many | not | standard |

fēi-dì | lìrú, | hēi-lóng-jiāng-shěng…-de
provincial-enclave | for-example | Heilongjiang-Province-ASSOC

jiā-gé-dá-qí-qū, | jìng-rán | méi | zài-hēi-lóng-jiāng-shěng, | ér
Jiagedaqi-District | unexpectedly | not | ZAI-Heilongjiang-Province | but

pǎo-dào-le | nèi-měng-gǔ-zìzhìqū…
run-to-PFV | Inner-Mongolia-Autonomous-Region

There are also many nonstandard provincial enclaves in China. For example, Jiagadaqi District that belongs to Heilongjiang Province administratively runs to Inner Mongolia Autonomous Region.

Figures in advent paths are also found to be depicted with liquid verbs, as shown in the sentences in (5-19), (5-20), and (5-21). In (5-19), the stars in the sky are conceptualized as spraying all over the sky. In the sentence in (5-20), Zhoushan islands are conceptualized as a continuation of the mountains that dives into the sea and surfaces afterwards. The glacier in (5-21) is conceptualized as pouring out of the valley. Although the glacier is moving constantly, this movement is not perceivable by the observer in a moving car in a flash.

(5-19) 同天鹅绒似的又蓝又紫的天空里，**洒满**了一天星斗。

tóng-tiān-éróng-shìde | yòu-lán-yòu-zǐ-de | tiān-kōng-lǐ,
like-velvet | blue-and-purple | sky-in

sǎ-mǎn-le | yìtiān | xīng-dǒu.
spray-full-PFV | whole-sky | star

The stars spray all over the sky that is blue and purple like velvet.

(5-20) 作为"浙江诸山之祖"的中支……山脉，向东北伸展为天台山脉、会稽山脉、四明山脉，继而以龙饮水之势**潜入**东海，枝枝丫丫**浮出**水面成就了舟山群岛。

zuò-wéi | "zhè-jiāng | zhū-shān-zhī-zǔ"-de
as | Zhejiang | all-mountain-ASSOC-ancestor-NOM

zhōng-zhī…-shān-mài, | xiàng | dōng-běi | shēn-zhǎn-wéi
Zhongzhi-Mountain | towards | northeast | extend-into

tiān-tái-shān-mài, | kuài-jī-shān-mài, | sìmíng-shān-mài, | jìér
Tiantai-Mountian | Kuaiji-Mountain | Siming-Mountain | then

yǐ-lóng-yǐn-shuǐ-zhī-shì | **qián-rù** | dōng-hǎi, | zhī-zhī-yā-yā
in-the-manner-of-dragon-drink-water | **dive-into** | East-Sea | branches

fú-chū | shuǐ-miàn | chéng-jiù-le | zhōu-shān-qún-dǎo.
float-out | water-surface | form-PFV | Zhoushan-Islands

As the ancestor of the mountains in Zhejiang, Zhongzhi Mountain extends northeast into Tiantai Mountain, Kuaiji Mountain, and Siming Mounatin; then dives into the East Sea like a dragon drinking water; and floats out of the water forming Zhoushan islands.

(5-21) 快到加斯泰伍时，窗外已能见到山谷中**奔涌而出**的道道冰川。

kuǎi-dào-jiā-sī-tǎi-wǔ-shí chuāng-wài   yǐ   néng   jiàn-dào
close-to-Jiasitaiwu-when   window-outside already can see

shān-gǔ-zhōng   **bēn-yǒng-ér-chū**-de   dào-dào   bīng-chuān.
valley-in   **surging-in-the-manner-of-exit**-NOM   CL-CL   glacier

When (we are) close to Jiasitaiwu, (we) can see the glaciers surging out of the valley from the window.

Eleven force verbs are observed in advent paths, as shown in the sentences in (5-22), (5-23), and (5-24). In (5-22), the positions of the cliff tombs and the granite cliff are fixed, but the granite composing the cliff is conceptualized as having been split by the cliff tombs. In the sentence in (5-23), the mountain range is compared to a dragon explicitly, and the tail of the dragon, which is one end of the mountain, is conceptualized as having been swung to Shanhai Pass. In the sentence in (5-24), the wall of the United Nations Headquarters Building is described as being thrown into the sky.

(5-22) 山上 5 座气势磅礴的崖墓凌空并列于峭壁之上，将半山腰处的花岗岩石一次垂直**辟开**。

shān-shàng   5-zuò   qìshìpáng-bó-de   yá-mù   líng-kōng
mountain-on   5-CL   magnificent   cliff-tomb high-up-in-the-air

bìng-liè   yú-qiào-bìzhī-shàng, jiāng bàn-shān-yāo-chù-de
juxtapose   ZAI-cliff-on   BA mountain-waist-place-NOM

huā-gāng-yán-shí   yícì chuízhí **pìkāi**.
granite   once vertically **cleave-open**

The five magnificent cliff tombs juxtaposing highly on the cliff cleave the granite at the mountain waist instantly.

(5-23) 我们可以将燕山想象为一条横卧京北的巨龙，龙尾**甩**在山海关，张开的龙嘴正好包住延庆。

wǒ-men kě-yǐ jiāng yān-shān   xiǎng-xiàng-wéi yī-tiáo
we   can BA Yan-Mountain   imagine-into   one-CL

héng-wò   jīng-běi-de   jù-lóng,   lóng-wěi
orizontally-crouch Beijing-north-NOM huge-dragon   dragon-tail

shuǎi zài-shān-hǎi-guān, zhāng-kāi-de   lóng-zuǐ   zhèng-hǎo
throw ZAI-Shanhai-Pass   open-NOM   dragon-mouth right

bāo-zhù yán-qìng.
wrap   Yanqing

We can imagine Yan Mountain as a huge dragon crouching horizontally at the north of Beijing, whose tail is thrown at Shanhai Pass and mouth precisely encases Yanqing.

(5-24) 如茵的绿色草坪之上……是联合国总部大楼。高高**抛上**蓝天的 2000 吨重的大楼的大理石石墙，显示……和平和发展的力量。

rú-yīn-de	lǜ-sè-cǎo-píng-zhī-shàng…	shì	lián-hé-guó
like-carpet-NOM	green-grassland-on	is	the-United-Nations

zǒng-bù-dà-lóu.	gāo-gāo-**pāo-shàng**-lán-tiān-de	2000-dūn-zhòng-de
headquarter-building	highly-**throw-up**-blue-sky-NOM	2000-ton-NOM

dà-lóu-de	dà-lǐ-shí	shí-qiáng,	xiǎn-shì…
building-ASSOC	granite	wall	show

hé-píng-hé-fā-zhǎn-de	lì-liàng.
peace-and-development-ASSOC	power

It is the UN Headquarter on the green carpet-like grassland. The granite wall weighing 2000 tons thrown into the sky shows the power of peace and development.

Many of the manner verbs in advent paths are quite creative and cannot be categorized into a certain type. The sentences from (5-25) to (5-27) below demonstrate some of the manner verbs. In the sentence in (5-25), the noun 醋 (*cù*, vinegar) is used as a verb, and it is followed by a verb-complement 出 (*chū*; out). The verb and the verb complement together depict the arrival of the lake at its current site. The noun 醋 (*cù*, vinegar) is seldom used as a verb. It is used here in a very innovative way. In the sentence in (5-26), the noun 虬 (*qiú*, dragon) is employed as a verb and again is followed by a verb complement 出 (*chū*; out). The dead branches are described as moving out of the bricks despite the fact that the relative location between the branches and the bricks has been changeless for a long time. The noun 虬 (*qiú*, dragon) has an extended usage, which is to be used as an adjective indicating the curling shape of an entity. The use of 虬 (*qiú*, dragon/curling) here is probably motivated by this sense. In the sentence in (5-27), the rocks are conceptualized as growing out of the sand.

(5-25) 原来这里拔海已经三千尺，在万山环绕之中，**醋出**一个大湖。

yuán-lái	zhè-lǐ	bá-hǎi	yǐ-jīng	sān-qiān-chǐ,
the-fact-is	here	altitude	already	three-thousand-foot

zài-wàn-shān-huán-rào-zhī-zhōng,	**cù-chū**	yī-gè	dà-hú
ZAI-countless-mountain-encompassment-in	**vinegar-out**	one-CL	large-lake

The fact is that the altitude here is already three thousand feet, and a large lake grows out among the encompassing of countless mountains.

(5-26) 砖石间**虬出**的枯藤，木门上贴满的干苔，使整个院子成了一个庞大的远年文物。

zhuān-shí-jiān	**qiú-chū**-de	kū-téng,
brick-among	**curl-out**-NOM	dead-branch

mù-mén-shàng   tiē-mǎn-de   gān-tái,   shǐ   zhěng-gè
wooden-door-on   stick-full-NOM dry-seaweed make   whole-CL

yuàn-zi chéng-le   yī-gè   páng-dà-de yuǎn-nián wén-wù
yard   become-PFV   one-CL   large   ancient   antique

The dead branches curling out from the bricks and the dry seaweed on the wooden door make the yard become a large ancient antique.

(5-27) 细柔的白沙中，却不时**生出**礁石。

xìróu-de   bái-shā-zhōng, què bù-shí   **shēng-chū**
soft   white-sand-in   but from-time-to-time **grow-out**

jiāo-shí
rock

From time to time rocks grow out from the soft white sand.

5.2 Frame-relative Motion

The situation described by a frame-relative motion expression involves a concrete entity in motion, but what is linguistically conceptualized as moving is the stationary surrounding with respect to which the concrete entity is moving (Talmy, 2000a, p. 130). The sentence in (5-28) is an example (Talmy, 2000a, p. 132). Altogether 93 sentences involving frame-relative motion are collected. Frame-relative motion expressions are analysed in terms of participants (Section 5.2.1) and verbs (Section 5.2.2).

(5-28)   I sat in the car and watched the scenery rush past me.

5.2.1 Participants in frame-relative motion

In addition to the normal participants, i.e., the Figure and the Ground, which will be discussed later, there is another type of participant associated with frame-relative motion, namely, the observer that factively undergoes physical displacement with the earth as the reference point. The physically moving observer does not directly take part in the fictive motion event, and it either is encoded in another clause, as shown in the sentence in (5-29), or can only be inferred from the context, as shown in the sentence in (5-30). In the sentence in (5-29), the pronuon 我 (wǒ; I) is the observer that factively moves, and it does not participate in the fictive motion event. In the sentence in (5-30), the factively moving entity is not present in the sentence, but it can be inferred from the context that the observer and the boat where the observer is located are the entities that really move.

(5-29) 我抬脚就往家里跑，井台，井台旁边的水槽子，井台旁边的大石头碾子，房户老周家的大玻璃窗子，我家的大高烟筒，在我一溜烟地跑起来的时候，我看它们都**移移动动**的了，它们都像**往后退**着。我越跑越快，好像不是我在跑，而像房子和大烟筒在**跑**似的。

wǒ	tái-jiǎo	jiù	wǎng	jiā-lǐ	pǎo,
I	lift-foot	immediately	towards	home-in	run

jǐng-tái,	jǐng-tái-páng-biān-de	shuǐ-cáo-zi,	jǐng-tái-páng-biān-de
well	well-beside-NOM	trough	well-beside-NOM

dà-shítóu-niǎn-zi,	fáng-hù-lǎo-zhōu-jiā-de	dà-bō-líchuāng-zi,
big-stone-roller	Zhou-house-ASSOC	big-galss-window

wǒ-jiā-de	dà-gāo-yān-tǒng,	zài-wǒ-yìliù-yān-de-pǎo-qǐ-lái-de-shíhòu,
our	big-tall-chimney	when-I-swiftly-run

wǒ	kàn	tā-men	dōu	**yíyídòng-dòng-de**	le,	tā-men	dōu	xiàng
I	see	they	all	**moving**	CRS	they	all	like

wǎng-hòu-tuì-zhe.	wǒ	yuè-pǎo-yuè-kuài,
backwards-withdraw-DUR	I	run-faster-and-faster

hǎo-xiàng	bú-shì	wǒ	zài	pǎo,	ér	xiàng-fáng-zi-hé-dà-
seem	not	I	DUR	run	but	seem-house-and-big-

yān-tǒng-zài-**pǎo**-shìde.
chimney-DUR-**run**

I lifted my feet and ran towards home. The well, the trough and big stone roller beside the well, the big glass window of Zhou's house, the big tall chimney of my house…when I was running swiftly, I saw all of them moving. They were drawing backwards. I ran faster and faster. It seemed that it was not me who was running; it was the house and the big chimney that were running.

(5-30) 两岸的屋舍越来越密，河道越来越窄，**从头顶掠过去**的桥越来越短，这就意味着一座小镇的来临。

liǎng-àn-de	wū-shè	yuè-lái-yuè-mì	hé-dào
two-river-bank-ASSOC	house	denser-and-denser	river-course

yuè-lái-yuè-zhǎi,	**cóng**	tóu-dǐng	**lüè-guò-qù**-de
narrower-and-narrower	**from**	overhead	**sweep-over**-NOM

qiáo	yuè-lái-yuè-duǎn,	zhè-jiù	yìwèi-zhe	yī-zuò
bridge	shorter-and-shorter	this	mean	one-CL

xiǎo-zhèn-de	lái-lín.
small-town-NOM	coming

The houses on the banks are becoming denser and denser; the river course is becoming narrower and narrower; the bridges sweeping over from overhead are becoming shorter and shorter. These all mean the coming of a small town.

In most cases, the observer is either located in some moving vehicle (as in (5-30)) or is itself moving (as in (5-29)) and experiencing the relative motion as a moving observer, but

occasionally the observer is merely a stationary one, as illustrated in the sentences in (5-31) and (5-32). In the sentence in (5-31), the relative motion occurs between the falling snow and the building. The falling snow is in factive motion with respect to the earth, and it falls onto the building. Linguistically, the building is conceptualized as rushing and moving towards the snow. In the sentence in (5-32), the relative motion is between the sea and the island. The entity in actual motion is the waves of the sea, but the entity that is linguistically conceptualized as moving is the island. In both the two sentences, the observer is an outsider of the situation under discussion. In contrast to the frame-relative motion events whose fictive effect is based on a moving observer, the fictive effect in this case is not based on an observer in motion; rather, it is observer-neutral. In Section 6.3 of Chapter 6, the fictive motion involved in sentences like (5-31) and (5-32) is referred to as observer-neutral frame-relative motion.

(5-31) 高耸的**洋楼**在夜的云霄中**扑迎**着**雪花**。

gāo-sǒng-de **yáng-lóu**   zài-yè-de-yún-xiāo-zhōng
towering   **western-style-building**   ZAI-night-cloud-in

pū-yíng-zhe   **xuě-huā**.
rush-at-welcome-DUR   **snow**

The towering western-style building rushes at the snow in the clouds at night.

(5-32) 海船快到胶州湾时，远远望见一点青（**小青岛**），**在**万顷的**巨涛中浮沉**。

hǎi-chuán-kuài-dào-jiāo-zhōu-wān-shí,   yuǎn-yuǎn   wàng-jiàn
ship-approach-Jiaozhou-Bay-when   from-a-distance   see

yì-diǎn-qīng   (**xiǎo-qīng-dǎo**),   **zài**-wàn-qǐng-de-**jù-tāo-zhōng fú-chén**.
a-little-cyan   **small-Qing-Island**   **ZAI**-vast-**wave-in**   **float-sink**

When the ship was approaching Jiaozhou Bay, (I) saw a little cyan (small Qing Island), which was floating and sinking in the vast waves.

If we take the earth as the reference point, the Figures in frame-relative motion are actually the Path locations the factively moving observers pass by. The observer is frequently located in some moving vehicle, such as the boat, the car, or the plane. Therefore, the Figures that are conceptualized as moving in frame-relative motion are mainly entities that vehicles pass, including general scenery, architectural structures, geographical phenomena, and plants, as illustrated in Table 5.3 below.

Table 5.3 Examples of participants in frame-relative motion expressions

Figure	**general scenery**	画面 (huà	风景 (fēng-	景色 (jǐng-sè,	山光水色	山影水痕

		miàn; picture)	*jǐng*; scenery)	view)	(*shān-guāng-shuǐ-sè*; the-landscape-of-mountains and lakes)	(*shān-yǐng-shuǐ-hán*; the-outlook-of-mountains-and-lakes)
	archetectural structures	桥 (*qiáo*; bridge)	小屋 (*xiǎo-wū*; cabin)	吊脚楼 (*diào-jiǎo-lóu*; stilted-building)	街市 (*jiē-shì*; street-market)	烟筒 (*yān-tǒng*; chimney)
	geographical phenomena	山峰 (*shān-fēng*; mountain-peak)	河 (*hé*; river)	田野 (*tián-yě*; field)	丘陵 (*qiū-líng*; hill)	珊瑚礁 (*shān-hú-jiāo*; coral-reef)
	plants	树木 (*shù-mù*; tree)	芦苇 (*lú-wěi*; reed)	树林 (*shù-lín*; forest)	花瓣 (*huā-bàn*; petal)	白桦树 (*bái-huà-shù*; silver-birch)
Ground	**Source locations**	斜刺里 (*xié-cì-lǐ*; oblique-direction)	前方(*qián-fāng*; front)		云间 (*yún-jiān*; clouds-in)	雾霭 (*wù-ǎi*; fog)
	Path locations	眼前 (*yǎn-qián*; eye-front)	头顶 (*tóu-dǐng*; head-top)	车窗 (*chē-chuāng*; car-window)	两侧 (*liǎng-cè*; two-sides)	脚下 (*jiǎo-xià*; foot-under)
	Goal locations	面 (*miàn*; face)	后 (*hòu*; back)	右边 (*yòu-biān*; right-side)	自己 (*zì-jǐ*; self)	车的后面 (*chē-de-hòu-miàn*; car-ASSOC-back)

The Ground with respect to which the Figure moves in frame-relative motion expressions is sometimes left out, as shown in the sentence in (5-33) below. When the Ground is encoded, it is usually an entity or orientation associated with the entity that really moves, such as the window of a vehicle, the body parts of a person who moves or is located in a moving entity, as illustrated in the sentence in (5-34), (5-35), and (5-36). The Source locations 两侧 (*liǎng-*

cè, two-side) and 前方 (*qián-fāng*; front) as defined with respect to the speaker are encoded in (5-34). The noun phrase 车窗 (*chē-chuāng*; car-window) is encoded in (5-35) to specify the Path location with respect to which the petals fictively move by. The sentence in (5-36) employs 眼前 (*yǎn-qián*; eye-front) and 车的后面 (*chē-de-hòu-mian*; car-ASSOC-back) as the Goal locations. All the entities functioning as the Ground in the three sentences are related to the factively moving object.

(5-33) 开车驰骋在这片古老神奇的土地上，……两侧的车窗外，群山、白桦林、旧式木屋……一股脑地全力**后退**。

kāi-chē	chíchěng	zài-zhè-piàn-gǔ-lǎo-shén-qíde-tǔ-dìshàng…
drive-car	run	ZAI-this-CL-ancient-mysterious-land-on

liǎng-cè-de	chē-chuāng-wài,	qún-shān,	bái-huàlín,
two-sides-NOM	car-window-outside	mountains	birch-forest

jiù-shìmù-wū…	yìgǔ-nǎo-de	quán-lì
old-fashioned-wooden-house	all	with-all-strength

hòu-tuì
back-draw

(We) drove on this ancient and mysterious land, (and) outside the windows on both sides of the car, the mountains, birch forests, old fashioned wooden houses…all drew back with all their strength.

(5-34) 山影水痕，尽**从两侧**缓缓**退去**，又**从前方**徐徐**移来**。（在船上）

shān-yǐng-shuǐ-hén,	jìn	**cóng liǎng-cè**	huǎn-huǎn
mountain-shadow-lake-trace	all	**from two-side**	slowly

tuìqù,	yòu	**cóng qián-fāng**	xú-xú	**yílái**.	(zài-chuán-shàng)
draw-back-go	again	**from the-front**	slowly	**move-come**	ZAI-boat-on

The mountains and lakes drew back from both sides, and then (other mountains and lakes) moved (towards us) from the front. (on a boat)

(5-35) 快到山顶时，一个急转弯，路边骤然闪出两株灿灿的樱花……娇艳的花瓣沉甸甸**拂过车窗**。

kuài-dào-shān-dǐng-shí	yī-gè	jízhuǎn-wān,
almost-arrive-at-mountain-top-when	one-CL	sudden-turn

lù-biān	zhòu-rán	shǎn-chū	liǎng-zhū	càn-càn-de
road-side	suddenly	flash-out	two-CL	blossoming

yīng-huā…	jiāo-yàn-de	huā-bàn	chén-diàn-diàn
cherry-tree	delicate-charming	petal	heavily

fú-guò **chē-chuāng**.
sweep-past **car-window**

(When we) arrived at the mountain top, (there was) a sudden turn, and two blossoming cherry trees flashed out suddenly, (their) heavy, delicate, and charming petals brushing against the windows of the car.

(5-36) 萧山、柯桥，刚刚**落到眼前**，却又远远**退到车的后面**。

xiāo-shān,	kē-qiáo,	gāng-gāng	**luò-dào**	**yǎn-qián**,
Xiao-Mountain	Ke-Bridge	just	**drop-to**	**in-front-of-eye**

què	yòu	yuǎn-yuǎn	**tuì-dào**	chē-de	**hòu-miàn**.
but	again	remotely	**recede-to**	car-ASSOC	**back**

Once Xiao Mountain and Ke Bridge dropped in front of us, they receded to the back of the car into the distance.

5.2.2 Verbs in frame-relative motion

Table 5.4 illustrates the typical verbs employed in frame-relative motion expressions. Compared with other types of fictive motion expressions, frame-relative motion sentences use a high proportion of manner verbs. Manner verbs account for 45.0% of all the verbs used in frame-relative motion expressions, and the largest component of manner verbs is miscellany verbs, which are singular and creative and therefore hard to categorize.

Table 5.4 Examples of verbs in frame-relative motion expressions

general motion verbs (11.9%)		开展 (*kāi-zhǎn*; expand)	移 (*yí*, move)	移移动 动 (*yíyí dòng-dòng*; move)	消失 (*xiāo-shī*; disappear)	挪 (*nuó*, move)
path verbs (43.1%)		来 (*lái*; come)	退后 (*tuìhòu*; step-back)	到 (*dào*; arrive)	过 (*guò*, pass)	退 (*tuì*; step-back)
manner verbs (45.0%)	**animal verbs** (7.3%)	奔 (*bēn*; rush)	跑 (*pǎo*; run)	驰 (*chí*, speed)	跃 (*yuè*; jump)	行 (*xíng*; walk)
	liquid verbs (8.3%)	浮沉 (*fú-chén*; float-sink)	涌 (*yǒng*; gush)		浮 (*fú*, float)	沉 (*chén*; sink)
	force verbs (3.7%)	甩 (*shuǎi*; throw)			扑 (*pū*; rush-at)	
	miscellany (25.7%)	掠 (*lüè*, sweep)	闪 (*shǎn*; flash)	划 (*huá*, sweep)	卷 (*juǎn*; roll)	摇晃 (*yáo-huàng*; shake)

General motion verbs encode almost no path or manner information. They only indicate the occurrence of motion, as shown in the sentences in (5-37), (5-38), and (5-39). In the sentence in (5-37), the stationary lake is described as moving from the observer's left side to the right side, but the actually moving entity with respect to the earth is the observer who is located in a moving car. The verb 挪 (*nuó*, move) is used in this sentence to specify the fictive movement of the lake, and the directional verb complement 到 (*dào*; to) is used to encode the path of the movement. In the latter part of the sentence in (5-38), the general motion verb 移 (*yí*, move) is employed to depict the fictive movement of the mountains and lakes, and the verb complement 来 (*lái*; come) specifies the path of the fictive movement. The same is true for the sentence in (5-39), where the verb 开展 (*kāi-zhǎn*; spread) conveys the general motion information about the field, and the directional verb complement 出 (*chū*; out) following it depicts the path of the fictive movement.

(5-37) 本来湖在左边，不知怎么一转弯，忽然**挪到**右边了。

běn-lái   hú   zài-zuǒ-biān,   bù-zhī   zěn-me
in-the-beginning lake ZAI-left-side   not-know how

yī-zhuǎn-wān, hū-rán   **nuó-dào**   yòu-biān   le.
once-turn   suddenly **shift-to** right-side CRS

In the beginning the lake was at the left side. (I) don't know how that (after we) turned, (it) shifted to (our) right side.

(5-38) 山影水痕，尽从两侧缓缓**退**去，又从前方徐徐**移来**。（在船上）

shān-yǐng-shuǐ-hén,   jìn cóng liǎng-cè   huǎn-huǎn
mountain-shadow-lake-trace   all from two-side   slowly

tuì-qù,   yòu cóng qián-fāng xú-xú   **yí-lái**.   (zài-chuán-shàng)
draw-back-go   again from the-front slowly   **move**-come ZAI-boat-on

The mountains and lakes drew back from both sides, and then (other mountains and lakes) moved (towards us) from the front. (on a boat)

(5-39) 过了一个停车场，两面的街市，已经**退**尽，玻璃外**开展出**一片田野。

guò-le   yī-gè   tíng-chē-chǎng, liǎng-miàn-de jiē-shì
pass-PFV   one-CL   parking-lot   two-side-NOM   street-market

yǐ-jīng **tuì-jìn**,   bō-lí-wài   **kāi-zhǎn-chū** yī-piàn   tián-yě.
already **draw-back**-all glass-outside **unfold-out**   out-CL   field

(We) passed a parking lot, and all the streets and markets on our both sides had already drawn back. The fields unfolded outside the window.

Path verbs account for 43.1% of all the verbs used in frame-relative motion sentences. The path information specified in path verbs includes backward motion, as shown by 退 (*tuì*

withdraw) in the sentences in (5-38) and (5-39); traversal, as in (5-40); moving towards the observer, as in (5-41); moving away from the observer, as in the sentence in (5-42); etc.

(5-40) 坐在轮船上两边看，那些古色古香各种各样的堡垒历历的从眼前**过去**。

zuò	zài-lún-chuán-shàng	liǎng-biān-kàn,	nà-xiē	gǔ-sè-gǔ-xiāng
sit	ZAI-ship-on	two-side-look	those	quaint

gè-zhǒng-gè-yàng-de	bǎo-lěi	lìlìde	cóng-yǎn-qián	**guò-qù**
various	fortress	one-by-one	from-eye-front	**pass**

(I) sat on the ship and looked towards the banks, (and I saw) various quaint fortresses go by in front of me, one after another.

(5-41) 有时窗外一座大崖石**来**了，便什么都不见；有时一片树木**来**了，只好从枝叶的缝儿里张一下。（在船上）

yǒu-shí	chuāng-wài	yī-zuò	dà-yá-shí	**lái**	le,
sometimes	window-outside	one-CL	big-rock	**come**	CRS

biàn	shén-me-dōu-bú-jiàn;	yǒu-shí	yī-piàn	shù-mù	**lái**	le,
then	whatever-all-no-see	sometimes	one-CL	trees	**come**	CRS

zhǐ-hǎo	cóng	zhī-yè-de	fèng-ér-lǐ	zhāng-yíxià	(zài-chuán-shàng)
only	from	branch-leave-ASSOC	gap-in	look-once	ZAI-boat-on

Sometimes a big rock comes from outside the window and then disappears; sometimes some trees come, and (we) have to look from the gaps between the branches and leaves. (on a boat)

(5-42) 走进火车卧铺包厢……走到过道上，向窗外望，童话里才会出现小木屋......时不时出来和我打声招呼，又飞速地**离开**。

zǒu-jìn	huǒ-chē	wò-pù	bāo-xiāng…	zǒu-dào	guò-dào-shàng,
walk-into	train	sleeper	cabin	walk-to	aisle-on

xiàng	chuāng-wài	wàng,	tóng-huà-lǐ	cái-huì	chū-xiàn
towards	window-outside	look	fairy-tale-in	will	appear

xiǎo-mù-wū…	shí-bù-shí	chū-lái	hé	wǒ
small-log-cabin	from-time-to-time	exit-come	to	me

dǎ-shēng-zhāo-hū,	yòu	fēi-sù-de	**líkāi**.
say-hi	then	immediately	**leave**

(I) walked into the sleeper cabin of the train…, walked onto the aisle, and looked outside. The small log cabins that usually appear in fairy tales came out to say "hi" to me from time to time and then disappeared immediately.

As mentioned earlier, manner verbs are employed a lot in frame-relative motion expressions based on the data. They can be generally grouped into animal verbs, liquid verbs, force verbs, and miscellany verbs. Below is a set of sentences employing verbs that are normally used to describe an animal. In the sentence in (5-43), the houses and chimneys are described as running whereas the actually running entity is the observer. In (5-44), the stationary house is

described as walking away gradually. In (5-45), the hills are conceptualized as animals that move in the manner of running quickly.

(5-43) 我抬脚就往家里跑……我越跑越快，好像不是我在跑，而像房子和大烟筒在**跑**似的。

> wǒ   tái-jiǎo   jiù   wǎng   jiā-lǐ   pǎo…
> I   lift-foot   immediately   towards   home-in   run

> wǒ   yuè-pǎo-yuè-kuài,   hǎo-xiàng   bú-shì   wǒ   zài pǎo, ér
> I   run-faster-and-faster   seem   not   I   DUR run but

> xiàng-**fáng-zi-hé-dà-yān-tǒng**-zài-**pǎo**-shìde.
> seem-**house-and-big-chimney**-DUR-**run**

The sail was set, and the white sail was raised up. The stone house of the hotel

I lifted my feet and ran towards home…I ran faster and faster. It seemed that it was not me who was running; it was the house and the big chimney that were running.

(5-44) 起航了，白帆升了上去，旅馆的石头房子渐**行**渐远。

> qǐ-háng le,   bái-fān   shēng-le-shàng-qù,   lǚ-guǎn-de
> set-sail CRS   white-sail   rise-PFV-up-go   hotel-ASSOC

> shítóu   fáng-zi   jiàn-**xíng**-jiàn-yuǎn.
> stone   house   gradually-**walk**-gradually-far

The sail was set, and the white sail was raised up. The stone house of the hotel became further and further away.

(5-45) 走完了死海，道路朝西一拐，方向正对耶路撒冷。这时，很多丘陵迎面**奔来**，闪过了一座又一座。

> zǒu-wán-le   sǐ-hǎi,   dào-lù   cháo-xī   yī-guǎi,
> walk-finish-PFV   Dead-Sea   road   towards-west   one-turn

> fāng-xiàng   zhèng-duì   yē-lù-sā-lěng.   zhè-shí   hěn-duō
> direction   right-face   Jerusalem   then   many

> qiū-líng yíng-miàn **bēn-lái**,   shǎn-guò-le   yī-zuò-yòu-yī-zuò.
> hill   in-face   **run-quickly-come**   flash-past-PFV   one-after-another

(After) passing the Dead Sea, the road turned west facing Jerusalem. Then many hills ran quickly towards (us), and they flashed by one after another.

In some cases, verbs typically associated with the movement of liquid are used in frame-relative motion expressions, as demonstrated in the sentences below. In the sentence in (5-46), the island in the sea is conceptualized as floating and sinking while the actual movement relative to the earth is the ups and downs of the waves. The manner of motion of the actually moving entity is transferred onto the stationary entity that is conceptualized as moving. In the sentence in (5-47), the sand dunes are conceptualized as liquid gushing towards the observer who is in a moving car. This is the only frame-relative motion instance identified in the data in which the Figure is conceptualized as liquid.

(5-46) 海船快到胶州湾时，远远望见一点青（小青岛），在万顷的巨涛中**浮沉**。

hǎi-chuán-kuài-dào-jiāo-zhōu-wān-shí   yuǎn-yuǎn   wàng-jiàn
ship-approach-Jiaozhou-Bay-when   from-a-distance see

yì-diǎn-qīng (xiǎo-qīng-dǎo), zài-wàn-qǐng-de-jù-tāo-zhōng **fú-chén**.
a-little-cyan small-Qing-Island ZAI-vast-wave-in **float-sink**

When the ship was approaching Jiaozhou Bay, (I) saw a little cyan (small Qing Island), which was floating and sinking in the vast waves.

(5-47) 每天早晨五点出发在伊朗高原上行车，见到的景象难于描述……等了很久，旭日的边沿似乎要出来了，却**涌过来**一片沙丘。

měi-tiān   zǎo-chén   wǔ-diǎn   chū-fā   zài-yī-lǎng-gāo-yuán-shàng
everyday   morning   5-o'clock   depart   ZAI-Iranian-Plateau-on

xíng-chē，   jiàn-dào-de   jǐng-xiàng   nán-yú   miáo-shù…děng-le
drive-car   see-NOM   scene   hard-to   describe   wait-PFV

hěn-jiǔ,   xù-rì-de   biān-yán   sìhū   yào   chū-lái
very-long   rising-sun-ASSOC   edge   seem   will   exit-come

le,   què   **yǒng-guò-lái**   yī-piàn   shā-qiū.
CRS   but   **gush-over**   one-CL   sand

(We) drove the car on Iranian Plateau from 5 o'clock every morning, and it is hard to describe the scenes we saw… (We) waited for a long time. The edge of the rising sun was about to appear, but (then) some sand dunes gushed over (towards us).

Two types of verbs that are normally used to describe the movement of an object with some kinetic energy are identified, as illustrated in (5-48) and (5-49). In the sentence in (5-48), the mountains are conceptualized as rushing at the observer who is in a moving car; in the sentence in (5-49), the various villages the observers passed by are conceptualized as having been thrown to the back of the observers. Force verbs employed in these two cases indicate the high speed of the factively moving entity.

(5-48) 一次去大漠中参观一个千佛洞，途中迎面**扑来**一片拔地而起的火焰山.（在车上）

yī-cì   qù   dà-mò-zhōng   cān-guān   yī-gè   qiān-fó-dòng,
once   go   great-desert-in   visit   one-CL   thousand-Buddhist-cave

tú-zhōng   yíng-miàn **pū-lái**   yī-piàn   bá-dì-ér-qǐ-de   huǒ-yàn-
journey-in   head-on **rush-at-come**   one-CL   towering   flame-

shān.   (zài-chē-shàng)
mountain   ZAI-car-on

Once (I) went to visit a thousand-Buddhist cave in the great desert, and a towering flame mountain rushed at me on the way. (in a car)

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(5-49) 沿着玉曲河一直往上，察瓦隆被我们**甩**在身后，秀丽多彩的龙普村被我们**甩**在身后，接着是拉达村、格布村。

yán-zhe	yù-qǔ-hé	yìzhí	wǎng-shàng,	chá-wǎ-lóng	bèi
along	Yuqu-River	all-the-way	upwards	Chawalong	BEI

wǒ-men	**shuǎi**	zài-shēn-hòu,	xiùlìduō-cǎi-de	lóng-pǔ-cūn	bèi
us	**throw**	ZAI-body-behind	colourful	Longpu-Village	BEI

wǒ-men	**shuǎi**	zài-shēn-hòu,	jiē-zhe	shì	lá-dá-cūn,
us	**throw**	ZAI-body-behind	following	is	Lada-Village

gé-bù-cūn.
Gebu-Village

(We drove) upwards all the way along the Yuqu River. Chawalong was thrown behind by us; the colourful Longpu Village was thrown behind by us; then Lada Village, Gebu Village…

Frame-relative motion events are probably the most embodied ones among all the types of fictive motion. In most cases, the observer indeed perceives the surrounding entities as moving though they believe that the entities are stationary with respect to the earth. The employment of a frame-relative motion sentence frequently creates some poetic effect. This is in accordance with the observation that almost half of the verbs used in frame-relative motion sentences are manner verbs, which serve at least partly to make the description more vivid. This can also explain the high percentage of miscellany verbs, as illustrated in the following three sentences. The Figures in frame-relative motion events are most directly experienced as moving, which makes them easier and more natural to be described as dynamic in a vivid way.

(5-50) 当游船行进在暮霭中的欧洲最长河流，两岸移步换景"**播放**"着质朴的田园风光纪录片。

dāng	yóu-chuán	xíng-jìn	zài-mù-ǎi-zhōng-de	ōu-zhōu
when	sightseeing-boat	advance	ZAI-evening-mist-NOM	European

zuìcháng	hé-liú,	liǎng-àn	yíbù-huàn-jǐng	"**bō-fàng**"-zhe
longest	river	two-bank	move-step-change-scene	**play**-DUR

zhìpǔ-de	tián-yuán	fēng-guāng	jìlù-piàn.
plain	idyllic	scenery	documentary

When the sightseeing boat advanced along the longest river of Europe in the evening mist, a plain documentary of the idyllic scenery was played continuously on both banks.

(5-51) 从上海走向傩，毕竟有漫长的距离。田野在车窗外层层**卷去**。

cóng	shàng-hǎi	zǒu-xiàng	nuó,	bìjìng	yǒu	màn-cháng-de
from	Shanghai	walk-towards	Nuo	after-all	have	very-long

jù-lí	tián-yě	zài-chē-chuāng-wài	céng-céng	**juǎn-qù**
distance	field	ZAI-car-window-out	layer-after-layer	**roll-away**

The distance is a very long walk from Shanghai towards Nuo. The field outside the car window rolled away layer after layer.

(5-52) 载满客人的小巴疾驶在成灌高速路上，阳光明媚，眼前不时**闪过**片片金黄的油菜花田。

zài-mǎn-kè-rén-de	xiǎo-bā	jíshǐ
carry-full-passenger-NOM	minibus	swift-run

zài-chéng-guàn-gāo-sù-lù-shàng,	yáng-guāng	míng-mèi,	yǎn-qián
ZAI-expressway-on	sunshine	bright	eye-front

bù-shí	**shǎn-guò**	piàn-piàn	jīn-huáng-de	yóu-cài-huā-tián.
from-time-to-time	**flash-past**	CL-CL	golden	rape-flower-field

The minibus full of passengers is running swiftly on the expressway. The sunshine is bright, and the golden rape flower fields flash past our eyes from time to time.

5.3 Pattern Paths

As one type of fictive motion, pattern paths are defined as the fictive movement of a configuration. For pattern paths, what is conceptualized as moving is some Gestalt structure composed of factive entities. The movement is fictive in the sense that instead of being a factively perceived movement on the part of the linguistic Figure, this fictive movement is caused by the movement of another related entity. This is illustrated in the sentence below (Talmy, 2000a, p. 129).

(5-53)   As I painted the ceiling, (a line of) paint spots slowly progressed across the floor.

In (5-53), the number of spots on the floor increases as the painting continues, but the spots themselves are static. The line of spots extends if the spots are conceptualized as forming an integral line. In this case, the progression of the configuration composed of a line of spots is caused by the painting action, which is executed by the painter.

There are 109 sentences in the data identified as pattern path sentences. In this section, pattern paths will be delineated in terms of the participants involved (Section 5.3.1) and the verbs employed (Section 5.3.2).

5.3.1 Participants in pattern paths

As illustrated in Table 5.5, the participants involved in pattern path sentences include the Figure whose change is characterized, the Ground with respect to which the Figure is

described, and the Reason, which does not directly participate in a fictive motion event but plays a role in it.

Table 5.5 Examples of participants in pattern path expressions

Figure	geographical phenomena	冰川 (*bīng-chuān*; glacier)	雪线 (*xuě-xiàn*; snow-line)	岸线 (*àn-xiàn*; coastline)	沙漠 (*shā-mò*; desert)	洪水 (*hóng-shuǐ*; flood)
	architectural and administrative structures	建筑物 (*jiàn-zhù-wù*; construction)	城市 (*chéng-shì*; city)	市场 (*shì chǎng*; market)	酒吧 (*jiǔ-bā*; bar)	燕国 (*yān-guó*; State-of-Yan)
	plants & animals	植物 (*zhíwù*; plant)	薇甘菊 (*wēi-gān-jú*; mikania-micrantha)	动植物 (*dòng-zhíwù*; animal-plant)	(金丝猴) 生存的范围 ([*jīn-sī-hóu*] *shēng-cún-de-fàn-wéi*; golden-monkey-living-area)	地中海实蝇 (*dì zhōng-hǎi-shí yíng*; Mediterranean-fruit-fly)
	images & shadows	云影 (*yún-yǐng*; cloud-shade)		树影 (*shù-yǐng*; tree-shadow)		自己的影儿 (*zìjǐ-de-yǐng-ér*; self-shadow)
Ground	Source locations	旧城 (*jiù-chéng*; old-city)	涌金门 (*yǒng-jīn-mén*; Yongjin-Gate)	长安 (*cháng-ān*; Changan)	北 (*běi*; north)	海面 (*hǎi-miàn*; sea-surface)
	Path locations	南北向支流 (*nán-běi-xiàng-zhī-liú*; south-north-direction-tributary)	交通干线 (*jiāo-tōng-gàn-xiàn*; artery-traffic)	洛阳 (*luò-yáng*; Luoyang)	燕山山脉 (*yān-shān shān-mài*; Yan-Mountains)	大洋 (*dà-yáng*; ocean)
	Goal locations	湖心方向 (*hú-xīn-*	北 (*běi*; north)	陆地 (*lù-dì*; land)	巴西利亚 (*bā-xī-lì*	上方 (*shàng-fāng*;

		fāng-xiǎng; lake-centre-direction)			*yà*, Brasilia)	upper-side)
	General locations	洞顶 (*dòng-dǐng*; cave-top)	云贵高原 (*yún-guì-gāo-yuán*; Yungui-Plateau)	各个角落 (*gè-gè-jiǎo-luò*, every-corner)	沙地 (*shā-dì*, desert)	草叶 (*cǎo-yè*, grass-blade)
Reason		河流的侵蚀作用 (*hé-liú-de-qīn-shí-zuò-yòng*; river-ASSOC-erosion-effect)	气候 (*qì-hòu*; climate)	沙漠侵蚀 (*shā-mò-qīn-shí*, desert-erosion)	入海泥沙量的减少 (*rù-hǎi-ní-shā-liàng-de-jiǎn-shǎo*; enter-sea-sediment-reduction)	珊瑚虫 (*shān-hú-chóng*; coral)

What fictively moves in pattern paths is the configuration of factive entities, which can either be geographical entities, as shown in the sentence in (5-54); architectural or administrative structures, as illustrated in (5-55) and (5-56); entities related with plants or animals; such as in (5-57); and occasionally images or shadows, as demonstrated in the sentence in (5-58). In (5-54), the Figure that is conceptualized as fictively stepping back is the waterfall, but what changes in effect is the surface of the earth holding the waterfall. It is the surface of the earth that shrinks due to the erosion effect of the river. The waterfall as a configuration is linguistically conceptualized as drawing back. The market in (5-55) is conceptualized as an integral entity that extends and blends with another market, whereas the internal components of the market are heterogeneous, containing various stalls or shops, etc. The physical expansion of the market is the result of constructing more shops and stalls, but linguistically the market is described as one entity. A similar cognitive mechanism is applied to the sentence in (5-56), which conceptualizes the provincial boundary as a locational entity moving from one place to another, while in fact, the location of the boundary between the

two provinces is more like the result of a political action. The change of the boundary is probably signalled by the changes of the names of the local institutions or the jurisdictional limits of the two provinces.

(5-54) 河流的侵蚀作用使**瀑布**每年**退后** 3 厘米左右。

hé-liú-de	qīn-shí-zuò-yòng	shǐ	**pù-bù**	měi-nián
river-ASSOC	erosion-effect	make	**waterfall**	every-year

tuì-hòu	3-límǐ	zuǒ-yòu.
draw-back	3-centimetre	around

The erosion effect of the river makes the waterfall draw back around 3 centimeters every year.

(5-55) 很少城市的**市场**可以如此**蔓延出来**，跟另一个市场**融合**一起。

hěn-shǎo	chéng-shì-de	**shìchǎng**	kě-yǐ	rú-cǐ
few	city-ASSOC	**market**	can	like-this

màn-yán-chū-lái,	gēn	lìng-yī-gè	shìchǎng	**róng-hé**	yìqǐ.
expand-out-come	with	another	market	**blend**	together

Few markets in the city can expand out like this and blend together with another market.

(5-56) 模糊的省界导致双方仍然纠纷不断，到后来，**省界后退到**微山湖西岸。

mó-hú-de	shěng-jiè	dǎo-zhì	shuāng-fāng	réng-rán
fuzzy	provincial-boundary	cause	two-party	still

jiū-fēn	bú-duàn,	dào-hòu-lái,	**shěng-jiè**	**hòu-tuì-dào**
dispute	not-stop	later	**provincial-boundary**	**draw-back-to**

wēi-shān-hú	xī-àn.
Weishan-Lake	west-bank

The fuzzy provincial boundary caused many disputes between the two parties. Later, the provincial boundary drew back to the west bank of Weishan Lake.

(5-57) 初期，一些喜湿的**植物**在湖滨浅洼地大量繁殖，并逐渐**向**湖心方向**推进**。

chū-qī,	yìxiē	xǐ-shī-de	**zhíwù**	zài-hú-bīn-qiǎn-wā-dì
initially	some	hydrophilous	**plant**	ZAI-lakeside-shallow-depression

dà-liàng	fán-zhí	bìng	zhú-jiàn	**xiàng**	hú-xīn-fāng-xiàng
in-quantity	reproduce	and	gradually	**towards**	lake-heart-direction

tuī-jìn.
advance

Initially, some hydrophilous plants reproduced in quantity at the lakeside shallow depression and advanced gradually towards the middle of the lake.

(5-58) 有谁会在意寂静的湖里婆娑的**树影**，也顺着阳光**生长**，也在夜晚**落幕**，只是每一个清晨也雀跃着自水中**升起**。

yǒu-shuí	huì	zǎ-yì	jìjìng-de	hú-lǐ	pó-suō-de	**shù-yǐng,**
who	will	notice	quiet	lake-in	dancing	**tree-shadow**

yě	shùn-zhe	yáng-guāng	**shēng-zhǎng,**	yě	zǎi-yè-wǎn
also	with	sunshine	**grow**	also	at-night

luò-mù,	zhǐ-shì	měi-yī-gè	qīng-chén	yě	què-yuè-zhe	zì
fall	only	every	morning	also	joyfully	from

shuǐ-zhōng	**shēng-qǐ.**
water-in	**rise-up**

Who will notice the shadow of the trees in the quiet lake that grows with the sunshine, falls at night, and rises up joyfully from the water every morning?

The plants in the sentence in (5-57) are conceptualized as an integral entity moving towards the centre of the lake, whereas the real situation is that the plants propagate massively and that the younger the plant is, the closer it is to the centre of the lake. In this way, the increase of the plant area is described as the forward movement of the plants as a whole. In (5-58), the image of the trees in the lake changes due to the existence and location of the sun, but linguistically it is conceptualized as an integral entity growing, disappearing, and rising out of the water.

The Ground in pattern paths can generally be classified into the Source location, the Path location, the Goal location, and the General location. The description of geographical phenomena with pattern paths frequently does not encode the Ground, as shown in the sentence in (5-59).

(5-59) 自小冰期以来，世界各地的**冰川**多数在**退缩**。

zì	xiǎo-bīng-qī	yǐ-lái,	shìjiè-gè-dìde	**bīng-chuān**
since	Little-Ice-Age	on	around-the-world-ASSOC	**glacier**

duō-shù	zài	**tuìsuō.**
most	DUR	**recede**

Since the Little Ice Age, most glaciers around the world have been receding.

For pattern path sentences with reference points, it is usually the Goal location that is encoded, as illustrated in the sentences in (5-60), (5-61), and (5-62). The most frequently encoded Ground element, i.e., the Goal location, is often a general one compared with the Ground encoded in other types of fictive motion expressions. In (5-60), the cardinal direction 北 (*běi*; north) is encoded to specify the goal direction of the fictive movement; in (5-61), the general orientation 圩田内部地带 (*wéi-tián-nèi-bù-dìdài*; inner-region-of-Weitian) is employed to depict the direction of the extension on the part of the residence area; in contrast

to (5-60) and (5-61), the sentence in (5-62) encodes the place 临安 (*lín-ān*; place name) as a specific Goal location.

(5-60) 中国东北地区多年冻土南界比 20 世纪初**向北后退**了 100 多公里。

zhōng-guó	dōng-běi	dìqū	duō-nián	dòng-tǔ	nán-jiè
China	Northeast	region	many-year	tundra	south-boundary

bǐ	20-shìjìchū	**xiàng-běi**	**hòu-tuì**-le
compare	20-century-beginning	**towards-north**	**back-draw**-PFV

100-duō-gōng-lǐ.
100-plus-kilometer

The southern boundary of the tundra in Northeast China has drawn back for more than 100 kilometers towards the north compared with the early 20th century.

(5-61) 圩田的开发过程，也是居住点不断**向圩田内部地带延伸**的过程。

wéi-tián-de	kāi-fā	guò-chéng, yě	shì	jū-zhù-diǎn
Weitian-ASSOC	development	process also	is	residence

bú-duàn	**xiàng**	**wéi-tián**	**nèi-bù-dìdài**	**yán-shēn**-de
continuously	**towards**	**Weitian**	**inner-region**	**extend**-NOM

guò-chéng.
process

The development process of Weitian is also the continuous extending process of the residence zone towards the inner region of Weitian.

(5-62) "勾栏瓦舍"本是北宋汴梁的"综合性娱乐市场"，随着南迁也**移到**了**临安**。

"gōu-lán-wǎ-shě"	běn	shì	běi-sòng
Goulan-Washe	originally	is	Northern-Song-Dynasty

biàn-liáng-de	"zōng-héxìng	yú-lè	shìchǎng",
Bianliang-ASSOC	comprehensive	recreational	market

suízhe	nán-qiān	yě	**yídào**-le	**lín-ān**.
along-with	south-movement	also	**move-to**-PFV	**Linan**

"Goulan" and "Washe" were originally the comprehensive recreational market in Bianliang in Northern Song Dynasty, (and they) also moved to Linan along with the southward movement (of the government).

The Source location, Path location, and General location are encoded occasionally. In the sentence in (5-63), the Source location 涌金门 (*yǒng-jīn-mén*; Yongjin-Gate) follows the preposition 从 (*cóng*; from). In (5-64), the cities 洛阳 (*luò-yáng*; place name) and 开封 (*kāi-fēng*; place name) specify the Path locations that the capital city fictively passed. In (5-65), the propagation of the plants is conceptualized as the expansion and advance of the plants in the desert, and the desert is encoded as the General location where the fictive motion takes place.

(5-63) 今日的西湖，才回复到明代的情况；新的市面，慢慢**从涌金门**向南山一带**发展**。

jīn-rì-de	xī-hú,	cái	huí-fù-dào	míng-dài-de
current	West-Lake	just	recover-to	Ming-Dynasty-ASSOC

qíng-kuàng;	xīn-de	shì-miàn,	màn-màn	**cóng**	**yǒng-jīn-mén**
condition	new	market	slowly	**from**	**Yongjin-Gate**

xiàng	nán-shān	yí-dài	**fā-zhǎn**.
towards	South-Mountain	region	**progress**

The current West Lake has just recovered to the condition it had in the Ming Dynasty; the new market has progressed from Yongjin Gate towards South Mountain.

(5-64) 此后，这种文明的核心城市——首都才逐渐向东转移，**经过洛阳、开封**，慢慢接近大海。

cǐ-hòu,	zhè	zhǒng	wén-míng-de	hé-xīn	chéng-shì-----
later	this	type	civilization-ASSOC	core	city

shǒu-dū	cái	zhú-jiàn	xiàng-dōng	zhuǎn-yí	**jīng-guò**
capital	only	gradually	eastwards	move	**pass**

luò-yáng,	**kāi-fēng**,	màn-màn	jiē-jìn	dà-hǎi.
Luoyang	**Kaifeng**	slowly	approach	sea

Later, the core city of civilization------the capital, moved gradually eastwards, passed Luoyang and Kaifeng, and approached the sea slowly.

(5-65) 沙丘和草格的交替在沙地里构成了独有的景观，同时也显现出人工植被与天然水草**在沙地中延展**，并一点一点向前推进的情形。

shā-qiū-hé-cǎo-gé-de-jiāo-tì	zài-shā-dì-lǐ
sand-dune-and-artificial-grassland-ASSOC-alternation	ZAI-desert-in

gòu-chéng-le	dú-yǒu-de	jǐng-guān,	tóng-shí	yě	xiǎn-xiàn-chū
form-PFV	special	scenery	simultaneously	also	show-out

rén-gōng	zhí-bèi	yǔ	tiān-rán	shuǐ-cǎo	**zài-shā-dì-zhōng**
artificial	plant	and	wild	water-plant	ZAI-**desert-in**

yán-zhǎn,	bìng	yì-diǎn-yì-diǎn	xiàng-qián-tuī-jìn-de	qíng-xíng.
expand	and	little-by-little	forwards-push-NOM	situation

The alternations of sand dunes and artificial grasslands form a special scene in the desert, and at the same time (they also) show the situation that artificial plants and wild water plants expand and push forward little by little in the desert.

A Reason is encoded for some pattern paths, though most of the time the Reason explicitly present is not the direct reason causing the fictive movement on the part of the Figure, as shown in the following sentences in (5-66) and (5-67). In (5-66), what directly causes the drawing back of the boundary towards the south is the changing of the agriculture area and grassland area, which is caused by various reasons due to the arrival of the Little Ice Age. In

this case, the climate change is the indirect cause while the change of the area used for planting crops and grass is the direct factor leading to the fictive conceptualization of the movement on the part of the boundary. The same is true for the sentence in (5-67). The capital of Brazil is moved to Brasilia under the influence of the government, but the more direct related events are the series of actions taken by the government to change the capital. The original capital is not literally moved to another place.

(5-66) 随着小冰期到来，农牧界线向南退缩。

> **suízhe xiǎo-bīng-qī dào-lái,** nóng-mù-jiè-xiàn
> **with Little-Ice-Age coming** farmland-grassland-boundary

> **xiàng**-nán **tuì-suō.**
> **towards**-south **draw-back-shrink**

With the coming of the Little Ice Age, the boundary between the farmland and the grassland drew back southwards.

(5-67) 1956年，巴西决定将首都迁至中部高原上的巴西利亚。

> 1956-nián, **bā-xī** juédìng **jiāng** shǒu-dū **qiān-zhì**
> 1956-year **Brazil** decide **BA** capital **move-to**

> zhōng-bù-gāo-yuán-shàng-de bā-xī-lìyà
> Central-Plateau-on-NOM Brasilia

In 1956, Brazil decided to move its capital to Brasilia on the Central Plateau.

5.3.2 Verbs in pattern paths

As shown in Table 5.6 below, the verb types for pattern paths are relatively simple, including general motion verbs, path verbs, and manner verbs that are further categorized into force verbs and other verbs encoding various types of manner information.

Table 5.6　Examples of verbs in pattern path expressions

general motion verbs (39.7%)		传递 (chuán-dì; transmit)	迁 (qiān; move)	延伸 (yán-shēn; extend)	扩展 (kuò-zhǎn; expand)	移动 (yídòng; move)
path verbs (31.2%)		上升 (shàng-shēng; ascend)	后退 (hòu-tuì; back-withdraw)	接近 (jiē-jìn; approach)	经过 (jīng-guò; pass)	跨越 (kuà-yuè; step-over)
manner verbs (29.1%)	force verbs (15.6%)	推 (tuī; push)	撕 (sī; tear)	推进 (tuī-jìn; advance)	切 (qiē; cut)	刻 (kè; carve)
	miscellany (13.5%)	披 (pī; wrap-	爬 (pá; climb)	生长 (shēng-	落幕 (luò-mù;	搬 (bān; carry)

| | | around) | | *zhǎng*; grow) | drop-curtain) | |

It can be seen from Table 5.6 that general motion verbs and path verbs account for a large proportion. Below are a set of examples illustrating the general motion verbs in pattern paths. In the sentence in (5-68), the use of the general motion verbs 扩展 (*kuò-zhǎn*; expand) and 延伸 (*yán-shēn*; extend) endows the glacier with a dynamic feature, while the seemingly movement of the glacier is caused by the increment of the ice amount, which is further caused by the temperature decrease as encoded in the sentence. The provincial capital in the sentence in (5-69) does not move from one place to another physically. Rather than moving all the buildings and facilities from the old place to the new one, the government constructed or reconstructed new buildings and facilities in the new place, leaving the old ones to the old place. Yet linguistic strategies are available for us to conceptualize the provincial capital as moving from one place to another. In the sentence in (5-70), the water front is conceptualized as being expanded towards the sea passively. In this case, the water front is construed as an integral configuration, but in effect, the visually perceived expansion of the water front is caused by the increasing of the land area, which is probably caused by land reclamation.

(5-68) 而在距今 1.8 万年前后……全球气温降低……大陆冰川极度**扩展**，山岳冰川不断向低处**延伸**。

ér   zài-jù-jīn-1.8-wàn-nián-qián-hòu…   quán-qiú   qìwēn
but   at-from-now-18,000-year-around   whole-globe   temperature

jiàng-dī…   dà-lù   bīng-chuān   jídù   **kuò-zhǎn**,
decrease   continental   glacier   extremely   **expand**

shān-yuè   bīng-chuān   bú-duàn   xiàng   dī-chù   **yán-shēn**.
mountain   glacier   continuously   towards   low-region   **extend**

But around 18,000 years ago, the global temperature decreased, the continental glacier expanded greatly, and the mountain glacier continuously extended towards the lower regions.

(5-69) 今日的西湖，才回复到明代的情况；……省府也**移到**了松木场，这才有了南宋的大杭州规模。

jīn-rì-de   xī-hú,   cái   huífù-dào   míng-dài-de
current   West-Lake   just   recover-to   Ming-Dynasty-ASSOC

qíng-kuàng;...   shěng-fǔ   yě   **yídào**-le   sōng-mù-chǎng,
condition   provincial-capital   also   **move-to**-PFV   Songmuchang

zhè   cái   yǒu-le   nán-sòng-de
this   just   have-PFV   Southern-Song-Dynasty-ASSOC

dà-háng-zhōu   guī-mó.

Great-Hangzhou   scale

The current West Lake has just recovered to the condition in the Ming Dynasty…The provincial capital was also moved to Songmuchang. Thus the scale of the Great Hangzhou in the Southern Song Dynasty was formed.

(5-70) 在宁波南部和台州沿岸，岸线曲折，岸线被不断地**向海扩展**。

zài-nínɡ-bō-nán-bù-hé-tāi-zhōu-yán-àn,
ZAI-Ningbo-south-section-and-Taizhou-coast

àn-xiàn	qū-zhé,	àn-xiàn	bèi	bú-duàn-de	**xiànɡ**
coastline	winding	coastline	BEI	continuously	**towards**

hǎi   **kuò-zhǎn**.
sea   **expand**

The coastline at the south of Ningbo and along the coast of Taizhou is winding and has been continuously expanding towards the sea.

Sentences from (5-71) to (5-73) are pattern path examples using path verbs. In the sentence in (5-71), the expansion of the State of Yan is described as the country itself crossing over the mountains. The path verb 翻越 (*fān-yuè*, cross-over) is employed to express the traversal Vector. In the sentence in (5-72), the notion "capital" is conceptualized as an integral physical configuration that moved towards the east, passed several cities, and approached the sea. This process took hundreds of years crossing several dynasties, and the capital was not a constant entity as described in the sentence. Rather, it is established by different governments in different places. The path verbs 经过 (*jīng-guò*, pass) and 接近 (*jiē-jìn*; approach) are employed to depict this fictive movement. The forest in the sentence in (5-73) is conceptualized linguistically again as an integral configuration that drew back into the canyon. A more factive conceptualization is that the forest was composed of many trees, and the trees began to die from one side of the forest inwards gradually until almost all the trees were dead between the side of the forest and the canyon. The path verb 撤 (*chè*, withdraw) is used to convey this seemingly dynamic event.

(5-71) 燕国成功地**翻越**燕山山脉，并向辽东地区发展。

yān-guó	chénɡ-gōng-de	**fān-yuè**	yān-shān-shān-mài,	bìnɡ	xiànɡ
State-of-Yan	successfully	**cross**	Yanshan-Mountain	and	towards

liáo-dōng-dìqū   fā-zhǎn.
Liaodong-area   develop

The State of Yan crossed the Yanshan Mountains successfully and developed towards the Liaodong area.

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(5-72) 此后，这种文明的核心城市——首都才逐渐向东转移，**经过**洛阳、开封，慢慢**接近**大海。

cǐ-hòu,	zhè	zhǒng	wén-míng-de	hé-xīn	chéng-shì-----
later	this	type	civilization-ASSOC	core	city

shǒu-dū	cái	zhú-jiàn	xiàng-dōng	zhuǎn-yí	**jīng-guò**
capital	only	gradually	eastwards	move	**pass**

luò-yáng,	kāi-fēng,	màn-màn	**jiē-jìn**	dà-hǎi.
Luoyang	Kaifeng	slowly	**approach**	sea

Later, the core city of civilization------capital, moved gradually eastwards, passed Luoyang and Kaifeng, and approached the sea slowly.

(5-73) 起初，植物的主力部队尚能在冰后期的温暖中向高原内部回流，然而渐渐高不可攀，直到 80 万年前严酷冰期浩劫之后，大部乔木和森林灭绝了，余部**撤**至东南山地峡谷。

qǐ-chū,	zhíwù-de	zhǔ-lì-bù-duì	shàng-néng	zài-
originally	plant-ASSOC	main-force	still-can	ZAI-

bīng-hòu-qī-de-wēn-nuǎn-zhōng	xiàng	gāo-yuán-nèi-bù	huí-liú,
post-glacial-stage-NOM-warmth-in	towards	plateau-inside	backflow

rán-ér	jiàn-jiàn	gāo-bù-kě-pān,	zhídào	80-wàn-nián-qián
but	gradually	too-high-to-reach	until	800,000-year-ago

yán-kù-bīng-qī-hào-jié-zhī-hòu,	dà-bù	qiáo-mù-hé-sēn-lín	miè-jué-le,
severe-ice-age-after	most	arbor-and-forest	die-out-PFV

yú-bù	**chè-zhì**	dōng-nán-shān-dì-xiá-gǔ.
remaining	**draw-back-to**	southeast-mountainous-region-canyon

Originally, most plants could still flow back towards the inner section of the plateau in the warmth of the post glacier stage, but (the plateau) gradually became too high. Until the period following the severe ice age 800,000 years ago, most woods and forests died out, and the remaining ones drew back to the southeast mountains and canyons.

Force verbs are the only type of manner verbs that can be grouped together with one label. The sentences in (5-74), (5-75), and (5-76) illustrate how force verbs are used. The verb predicates 推移 (*tuī-yí* push-move) in (5-74), 撕 (*sī*; tear) in (5-75), and 切 (*qiē*; cut) in (5-76) all indicate movement with some force.

(5-74) 伏天，雪水融汇成万千条无名小溪向下奔流，山中雪线便徐徐地往上方**推移**。

fú-tiān,	xuě-shuǐ	róng-huì-chéng	wàn-qiān-tiáo
hot-summer-day	snow-water	melt-into	thousand-CL

wú-míng	xiǎo-xī	xiàng-xià	bēn-liú,	shān-zhōng	xuě-xiàn
nameless	brook	downwards	rush-flow	mountain-in	snow-line

biàn	xú-xú-de	wǎng-shàng-fāng	**tuī-yí**
thus	slowly	upwards	**push-move**

In hot summer days, the snow melts into thousands of nameless brooks that rush downwards, and thus the snow line of the mountain is slowly pushed upwards.

(5-75) 地幔对流在洋中脊处将洋底**撕开**一条大裂缝。

dì-màn	du ì-liú	zài-yáng-zhōng-jǐ-chù	jiāng	yáng-dǐ
mantle	convection	ZAI-ocean-ridge-place	BA	ocean-bed

sī-kāi	yī-tiáo	dà	lièfèng.
tear-open	one-CL	great	grift

The mantle convection tore a great grift in the ocean bed at the ocean ridge.

(5-76) 奔流的北盘江及其诸多支流在云贵高原上**切开**了一道道奇美峡谷。

bēn-liú-de	běi-pán-jiāng	jí	qí	zhū-duō	zhī-liú
rush-flow-NOM	Beipan-River	and	its	many	tributary

zài-yún-guì-gāo-yuán-shàng	**qiē-kāi**-le	yī-dào-dào	qíměi
ZAI-Yunnan-Guizhou-Plateau-on	**cut-open**-PFV	a-CL-CL	spectacular

xiá-gǔ.
canyon

The rushing Beipan River and many of its tributaries cut out several canyons on the Yunnan-Guizhou Plateau.

Miscellany verbs are illustrated in the sentences in (5-58) above, in which 生长 (*shēng-zhǎng*; grow) and 落幕 (*luò-mù*, drop-curtain; fall) are used.

5.4 Access Paths

Access path expressions depict "a stationary object's location in terms of a path that some other entity might follow to the point of encounter with the object" (Talmy, 2000a, p. 136). The sentences in (5-77) and (5-78) are two examples of access path sentences. Access paths tend to have the function of directing the way, and this function is realized through the employment of dynamic linguistic forms. What is conceptualized as moving can either be a real person, such as in the sentence in (5-77); or the gaze or attention of a person, and both of the sentences in (5-77) and (5-78) can be such examples. It is self-evident that under normal conditions a person cannot and does not have the motivation to move to the cloud that is 1,000 feet up from the ground.

(5-77) The bakery is across the street from the bank.

(5-78) The cloud is 1,000 feet up from the ground.

5.4.1 Participants in access paths

The access path is the least frequent type of fictive motion collected. There are only 38 sentences identified as involving access paths. The entity whose location is characterized with an access path is usually a geographical or administrative location that is encoded as the Goal location of the access path. The entities with respect to which the access path is characterized are usually geographical or administrative locations expressed as Source locations or Path locations. Table 5.7 below illustrates the main participants in access paths.

Table 5.7 Examples of participants in access path expressions

Source locations	横山 (*héng-shān*; Heng-Mountain)	城 (*chéng*; city)	元上都 (*yuán-shàng-dū*; Xanadu)	阿木古郎镇 (*ā-mù-gǔ-láng-zhèn*; Amugulang-Town)
Path locations	瞿塘峡 (*qú-táng-xiá*; Qutang-Gorge)	乌珠穆沁草原 (*wū-zhū-mù-qìn-cǎo-yuán*; Wuzhumuqin-Grassland)	军用浮桥 (*jūn-yòng-fú-qiáo*; military-flying-bridge)	贝尔湖 (*bèi-ěr-hú*; Buir-Lake)
Goal locations	内蒙古高原 (*nèi-méng-gǔ-gāo-yuán*; Inner-Mongolian-Plateau)	呼伦贝尔草原 (*hū-lún-bèi-ěr-cǎo-yuán*; Hulunbuir-Grassland)	古镇 (*gǔ-zhèn*; ancient-town)	羌寨 (*qiāng-zhài*; Qiang-race-village)

5.4.2 Verbs in access paths

Table 5.8 below illustrates some examples of verbs employed in access path sentences. There are 93 tokens of verbs extracted from the 38 access path sentences. Only one occurrence of general motion verb is observed, and most of the verbs employed in access path sentences are path verbs.

Table 5.8 Examples of verbs in access path expressions

general motion verbs (1.1%)	延伸 (*yán-shēn*; extend)				
path verbs (86.0%)	入 (*rù*; enter)	出 (*chū*; exit)	到 (*dào*; arrive)	隔 (*gé*; separate/be-at-a-distance-from)	跨 (*kuà*; straddle)

	进 (*jìn*; enter)	经过 (*jīng-guò*, pass)	穿 (*chuān*; cross)	去 (*qù*, go)	返回 (*fǎn-huí* return)
manner verbs (12.9%)	行 (*xíng*; walk; ancient & formal)	走 (*zǒu*; walk; modern & colloquial)	切 (*qiē*; cut)	攀 (*pān*; climb-up)	渡 (*dù*, cross-river)

In many cases, Chinese access path sentences do not have a subject. The subject is present when the path verb 隔 (*gé*, separate/be at a distance from) is used, as illustrated in (5-79) and (5-80). In (5-79), the road and the temple are located across the street; in (5-80), the school is described as located across the temple.

(5-79) 与永利街**相隔**半条街，是荷里活道和文武庙。

yǔ   yǒng-lì-jiē   **xiāng-gé**   bàn-tiáo-jiē,   shì   hélǐ-huó-dào
with   Yongli-Street   **seperate**   half-CL-street   is   Hollywood-Road

hé   wén-wǔ-miào.
and   Wenwu-Temple

(The places that are) half a street apart (from) Yongli Street are Hollywood Road and Wenwu Temple.

(5-80) 学校离小庙不远，只**隔着**一条大路。

xué-xiào   lí   xiǎo-miào   bù-yuǎn,   zhǐ   **gézhe**
school   be-apart-from   small-temple   not-far   only   **seperate**

yì-tiáo   dà-lù.
one-CL   road

The school is not far from the temple and there is only a road in between.

Access path sentences featuring other path verbs are usually subjectless sentences, as demonstrated in the sentences in (5-81) and (5-82). In (5-81), the location of a village is characterized with reference to a county, and the relative position of the village and the county is conceptualized as the movement along a path. In the sentence in (5-82), the location of Buir Lake is described in terms of a path and fictive movement following it. In both sentences, the subject who conducts the movement is not specified, and this path can be followed by anyone who moves along it. It is probably just because of the uncertainty and arbitrariness of the subject who conducts the movement that the subject is absent from the sentence.

(5-81) 下绮罗离腾冲县城很近，**出**城**向**南一公里，再**向**左**拐**三四百米就**到**了。

xià-qǐ-luó   lí   téng-chōng-xiàn-chéng   hěn-jìn,   **chū**
Xiaqiluo   be-apart-from   Tenchong-Town   very-close   **exit**

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chéng	**xiàng**-nán	yī-gōng-lǐ,	zǎi	**xiàng**-zuǒ	**guǎi**
town	**towards**-south	one-kilometer	then	**towards**-left	**turn**

sān-sìbǎi-mǐ	jiù	**dào**	le.
three-four-hundred-metre	then	**arrive**	CRS

Xiaqiluo is very close to Tengchong. (If you) exit the town, (go) southwards for one kilometre, and turn left for another three or four hundred metres, then (you will) arrive there.

(5-82) 去贝尔湖本有一条捷径：从阿木古郎镇**向**西南**行至**浑德伦，**过**了乌尔逊河上一座军用浮桥后不远就**到**了。

qù bèi-ěr-hú	běn	yǒu	yìtiáo	jiéjìng:	**cóng**
go Buir-Lake	originally	have	one-CL	shortcut	**from**

ā-mù-gǔ-láng-zhèn	**xiàng**-xī-nán	**xíng-zhì**	hún-dé-lún,
Ah-Town	**towards**-west-south	**walk-to**	Hundelun

guò-le	wū-ěr-xùn-hé-shàng	yízuò	jūn-yòng	fú-qiáo
pass-PFV	Ur-River-on	one-CL	military	flying-bridge

hòu	bù-yuǎn	jiù	**dào**	le.
after	not-far	then	**arrive**	CRS

There originally was a shortcut to Buir Lake: (You start) from Ah Town and go towards the southwest direction to Hundelun, (and you will) arrive there not long after passing a military flying bridge on Ur River.

The missing of subjects may motivate another feature of access path sentences, i.e., that manner information is seldom encoded. Only twelve tokens and seven types of verbs are found to encode some manner information. What's more, the manner verbs are not as poetic as the manner verbs employed in other types of fictive motion expressions. For example, 行 (xíng; walk; ancient & formal) and 走 (zǒu; walk; modern & colloquial) are used seven times altogether, but their meaning in the sentences is not "walk"; instead, what they mean is either "general movement" as in 行 in (5-82) above or "to choose some road to use" as illustrated in 走 in (5-83) below. The manner verb 渡 (dù; move-in-water) implies that the Ground with respect to which the Figure moves is a river-like entity, as illustrated in the sentence in (5-84). Some verbs encoding manner information are employed because of the hypothetical Figure. In the sentence in (5-85), the route to the mountain top is designed for professional mountain-climbing staff, and the verb predicates accordingly are used to describe the actions executed by them, such as 攀 (pān; climb-upwards), 登 (dēng; ascend; usually used after an animate subject), and 切 (qiē; cut; meaning "traverse" in the mountaineering context).

(5-83) 从成都出发，**走**成灌高速，经都江堰，到达汶川县，萝卜寨就位于 10 公里以外的雁门乡境内。

cóng　　chéng-dū　chū-fā,　　**zǒu** chéng-guǎn-gāo-sù,　jīng
from　　Chengdu　start　　**walk** Chengguan-Highway　pass

dū-jiāng-yàn,　dào-dá　wèn-chuān-xiàn,　luó-bo-zhǎi
Dujiang-Dam　arrive-at　Wenchuan-Town　Luobo-Village

jiù　　wèi-yú　10-gōng-lǐ-yǐ-wài-de　yàn-mén-xiāng　jìng-nèi.
right　locate-at　10-kilometre-outside-NOM　Yanmen-Town　territory-in

(You) start from Chengdu and take the Chengguan Highway through Dujiang Dam. (When you) arrive at Wenchuan Town, Luobo Village is in Yanmen Town that is 10 kilometres away.

(5-84) 前往呼伦贝尔，最理想的是走 1287 年忽必烈征讨乃颜叛军的路线------以元上都……为起点……抵达流入贝尔湖的哈拉哈河，**渡河**进入呼伦贝尔草原。

qián-wǎng　hū-lún-bèi-ěr,　zuì-lǐ-xiǎng-de　shì　zǒu　1287-nián
head-for　Hulun-Buir　best　　　　　is　walk　1287-year

hū-bì-liè zhēng-tǎo　nǎi-yán-pàn-jūn-de　lù-xiàn------yǐ
Kublai　subjugate　Naiyan-rebel-army-NOM　route　　with

yuán-shàng-dū…　wéi　qǐ-diǎn…　　dǐ-dá　liú-rù-bèi-ěr-hú-de
Xanadu　　　　as　starting-point　arrive　flow-into-Buir-Lake-NOM

hā-lā-hā-hé,　**dù-hé**　　jìn-rù　hū-lún-bèi-ěr-cǎo-yuán.
Khalkha-River　**cross-river**　enter-into　Hulunbuir-grassland

The best route to take to go to Hulun Buir is the one along which Kublai subjugated the rebel army of Naiyan in 1287. (You) take Xanadu as the starting point,…arrive at Khalkha River that flows into Buir Lake, and cross the river to enter Hulunbuir grassland.

(5-85) 根据观察，发现南壁正下方岩沟上**攀**至 5500 米，向左横**切**，**切**上西南山脊后直接**登**顶的路线似乎是一条可行的新路线。

gēn-jù　　　guān-chá,　fā-xiàn　nán-bì　　zhèng-xià-fāng
according-to　observation　find　south-cliff　right-down-side

yán-gōu　shàng-**pān**-zhì　5500-mǐ,　xiàng-zuǒ　héng-**qiē**,
gully　upwards-**climb**-to　5500-metres　towards-left　horizontally-**cut**

qiē-shàng　xī-nán-shān-jǐ-hòu　zhíjiē　**dēng**-dǐng-de
cut-upon　southwest-ridge-after　directly　**ascend**-peak-NOM

lù-xiàn　shì-hū　shì　yì-tiáo　kě-xíng-de xīn　lù-xiàn.
route　seemingly　is　one-CL　doable　new　route

According to the observation, it is found that it is doable (if you) climb up to 5500 metres (from) the gully right below the south cliff, cut horizontally towards the left, cut upwards to the southwest ridge, and then climb to the peak directly.

It is not only that the verb predicates in access path expressions seldom encode manner information, but also other grammatical forms, such as adverbial phrases or adjectival phrases,

are observed rarely to encode manner information. Manner information is encoded least in access path sentences among all the fictive motion types.

CHAPTER 6 NEW TYPES OF FICTIVE MOTION

The six established types of fictive motion make up a large proportion in Chinese fictive motion expressions, but they cannot accommodate all the data. It is observed that some fictive motion expressions seem to be beyond the scope of the six types. The aim of this chapter is to describe the new types of fictive motion. It also discusses the relationships between types of fictive motion and the revised categorization, taking both the established types and the new types into consideration.

6.1 New Types of Fictive Motion

With the working definition proposed in Chapter 3, a set of fictive motion expressions are collected; with the conceptual features and the semantic descriptions, the six established types of fictive motion expressions proposed by Talmy can be identified. Following these two steps, it is found that there are some fictive motion expressions that fit into none of the six existing types. They can be seen as new types of fictive motion expressions, which may either uniquely exist in Chinese or may also be observable in other languages. In this section, the new types of fictive motion in Chinese will be discussed one by one.

6.1.1 Implied advent paths

The first type of new fictive motion expressions pertains to sentences that describe the locational relation between two static entities with linguistic terms typically encoding forceful contact. Table 6.1 below summarizes the conceptual features and semantic descriptions of implied advent paths involving forceful contact. It is worth noticing that although the values of conceptual features with regard to this new type of fictive motion are exactly the same as those for advent paths[26], the semantic descriptions are different. The main difference between this new type of fictive motion and advent paths lies in the fact that the motion sense is explicitly encoded in advent paths whereas it is only implicit in implied advent paths. What is described for the current type of fictive motion is a static state entailing preceding movement or movement afterward. As pointed out by Kemmer (2014), verbs of contact do not profile motion semantically, but they entail the relative movement between two entities before they make contact. Another feature of implied advent paths is that the

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[26] In this way, implied fictive motion with forceful contact can either be regarded as a new type of fictive motion or a subtype of non-prototypical fictive motion involving advent paths.

motion sense is frequently indicated by contact verbs that express motion with some force, such as 夹 (*jiā*; press-from two sides) and 抱 (*bào*; hug), as discussed below. The conceptual features will not be explained further since they are exactly the same as those for advent paths (see Section 2.4.3 in Chapter 2).

Table 6.1   Features of implied advent paths

conceptual features	semantic descriptions
Factive motion of some elements need not be present for that fictive effect.	Implied advent paths are involved in expressions that employ linguistic terms expressing forceful contact to describe the locational relationship between two entities that do not bear such a relationship in our belief.
The fictively moving entity is itself factive.	
The fictive effect is observer-neutral.	
What is conceived as fictively moving is an entity.	

One verb of forceful contact frequently observed in fictive motion expressions is 夹 (*jiā*; press-from-two-sides), as illustrated in the following example.

(6-1)   再往里走，就是一条沙土路，参天大树**夹**道。

zài   wǎng-lǐ   zǒu, jiù   shì   yī-tiáo   shā-tǔ-lù,   cān-tiān
again   towards-inside   walk then   is   one-CL   sandy-road   towering

dà-shù   **jiā**   dào.
tree   **press**   road

(I) continued to walk on to the inside, and there was a sandy road. The towering trees press in on the road.

In the sentence in (6-1), there is a mismatch between what we believe about the scene and the linguistic forms employed. The scene perceived is that of a road situated between the two rows of trees, and there is no motion or force existing between the road and the trees. The linguistic description indicates that the road and the trees are not merely static in an unrelated way. Instead, some force is conceptualized as being extended from the trees onto the road. I call this subtype of implied advent path expressions as "pressing fictive motion expressions".

In some cases, the linguistic contexts in which 夹 (*jiā*; press-from-two-sides) occurs also suggest an additional relationship between the two entities under discussion apart from the relative position that one entity is situated in between the other, as illustrated in the sentences in (6-2), (6-3), and (6-4). In the sentence in (6-2), 夹 (*jiā*; press-from-two-sides) is used in a verb-complement construction 夹出 (*jiā-chū*; squeeze-out). What is factive in this sentence is that there are tall weeds on both sides of the road, and what is fictive is that the weeds have

squeezed out the road. The dynamic verb complement 出 (*chū*; out) describes the presence of the road as the result of the squeezing action executed by the weeds and thus endows the sentence with more dynamic flavour.

(6-2)　人们喜欢的是那水泥道两边的小路，草萋萋的，一尺来高，**夹出**的路面平而干净无尘。

rén-men xǐ-huān-de shì nà shuǐ-ní-dào liǎng-biān-de xiǎo-lù,
people like-NOM is that cement-road two-side-NOM small-road

cǎo qī-qī-de, yī-chǐ-lái-gāo, **jiā-chū**-de lù-miàn
grass lush one-foot-high **press-out**-NOM road-surface

píng-ér-gān-jìng-wú-chén.
flat-and-clean

People like the small roads on both sides of the cement road. The lush grasses are one foot high, and the roads pressed by them on their both sides are flat and clean.

The sentence in (6-3) depicts a scene in which a river is located between two cliffs, while the linguistic conceptualization is that the cliffs are pressing the river from its both sides. The dynamic sense is made more salient through the employment of the continuous tense marker 着 (*zhe*) and the adverb 紧紧 (*jǐn-jǐn*; tightly). The progressive tense marker indicates that the action designated by the verb 夹 (*jiā*; press-from-two-sides) is ongoing and that this action began at some temporal point and may stop later. The adverb 紧紧 (*jǐn-jǐn*; tightly) indicates that a strong fictive directional force is conceptualized as existing between the cliffs and the river.

(6-3)　两岸陡壁之下**紧紧夹着**一条暴怒了的江。

liǎng-àn dǒu-bì-zhī-xià **jǐn-jǐn** **jiā-zhe**
two-bank steep-cliff-ASSOC-lower-part **tightly** **press-DUR**

yī-tiáo bào-nù-le-de jiāng.
a-CL angry river

The bases of the steep cliffs on both sides are tightly squeezing the angry river.

In the sentence in (6-4), the alley is conceptualized linguistically as being pressed by two high walls on its two sides, while the factive situation is that an alley is located between two walls. The passive voice employed in (6-4) indicates the complex relation between the alley and the walls. More than the simple relative location that the alley is between the two walls, there is a relative degree of controlling ability implied through using the passive construction. The walls are conceptualized as having a higher degree of controlling ability, and the alley,

on the other hand, is construed as having a lower degree of controlling ability, so that the alley is controlled by the walls through being pressed by them.

(6-4) 这些肮脏污浊不见天日的小巷，**被夹**在长满青苔的高墙之间。

zhè-xiē	āng-zāng	wū-zhuó	bú-jiàn-tiān-rìde	xiǎo-xiàng,	**bèi**
these	dirty	filthy	in-the-dark-NOM	small-alley	**BEI**

jiā zài-zhǎng-mǎn-qīng-tāi-de-gāo-qiáng-zhī-jiān.
press ZAI-grow-full-moss-NOM-high-wall-between

These dirty and filthy small alleys in the dark are pressed between high walls full of moss.

The above instances show the lateral force exerted by one entity onto another one. It is also possible for situations where one entity encircles another one to be conceptualized and expressed in fictive motion expressions, which I will call "encircling fictive motion expressions" as another subtype of implied advent paths. Similar to pressing fictive motion expressions, encircling fictive motion expressions depict situations involving two static adjacent entities in which one entity applies some force upon another one and thus makes forceful contact with it. As mentioned earlier in this section, although not designating motion directly, verbs of contact usually entail movement. The following sentences from (6-5) to (6-8) illustrate encircling fictive motion expressions with different verbs.

The sentence in (6-5) describes a situation in which there are many bamboo fungi around the cabin, but linguistically the houses are conceptualized as being clustered around by the bamboo fungi. It seems that there is an influence exerted inwardly onto the cabin from the bamboo fungi after the bamboo fungi moved to the cabin and made contact with it.

(6-5) 南大雁塔东侧的春晓园，木屋被**簇拥**[27]在竹笙中。

nán-dà-yàn-tǎ	dōng-cè-de	chūn-xiǎo-yuán,	mù-wū
South-Dayan-Pagoda	east-NOM	Chunxiao-Garden	wooden-house

bèi **cù-yōng** zài-zhú-shēng-zhōng.
BEI **cluster-around** ZAI-bamboo-fungus-in

(In the) Chunxiao Garden (that is) east of South Dayan Pagoda, the wooden houses are surrounded by bamboo fungi.

For the sentence in (6-6), what is factive is that there are mountains and trees around the lake, and what is fictive is that the lake is encircled and hugged by the mountains and trees. The

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[27] Whether the Chinese verb *簇拥* or its English translation *cluster* designates motion or merely entails motion is debatable. Here it is taken as a static verb entailing previous movement.

mountains and trees are conceptualized linguistically as exerting force upon the lake, and it is also implied that they have fictively moved to the lake and made contact with it.

(6-6) 清音平湖，四周青嶂翠峦**环抱**，古木参天。

　　　　qīng-yīn-píng-hú,　　sì-zhōu　　qīng-zhàng-cuì-luán　　**huán-bào**,
　　　　Qingyinping-Lake　　around　　green-mountain　　**hug**

　　　　gǔ-mù-cān-tiān.
　　　　ancient-tree-towering

　　　　Green mountains hug Qingyinping Lake and ancient trees tower into the sky.

The sentences in (6-7) and (6-8) illustrate cases where the verb of contact depicts an entity that is being encircled, i.e., the contact is depicted from the perspective of the entity being encircled. The scene described in the sentence in (6-7) is that there are mulberry fields among the lakes and rivers, but linguistically the mulberry fields are conceptualized as being set into the lakes and rivers like a gem in a setting, which implies that the mulberry fields were not surrounded by the lakes and rivers previously. The bell in (6-8) is conceptualized as being squeezed among the rails and the beams, while actually no force exists among the entities being discussed. The fictive force is described with regard to the entity being encircled, i.e., the bell.

(6-7) 整个杭嘉湖平原到处都是……河流和湖泊，而**镶嵌**于河流和湖泊之间的，总是成片的桑园。

　　　　zhěng-gè　　háng-jiā-hú-píng-yuán　　dào-chù-dōu　　shì… hé-liú-hé-hú-pō,
　　　　whole-CL　　Hangjiahu-Plain　　everywhere　　is　　river-and-lake

　　　　ér　　**xiāng-qiàn** yú-hé-liú-hé-hú-pō-zhī-jiān-de,　　zǒng　　shì
　　　　and　　**set**　　ZAI-river-and-lake-between-NOM　　always　　is

　　　　chéng-piàn-de　　sāng-yuán.
　　　　vast-stretches-of　　mulberry-field

　　　　There are rivers and lakes everywhere on the whole Hangjiahu Plain, and set among the rivers and lakes are always vast stretches of mulberry fields.

(6-8) 为何是这种安排，让古钟**挤**在围栏和拱墚里面，狭小又局促。

　　　　wèi-hé　　shì　　zhè　　zhǒng　　ān-pái,　　ràng gǔ-zhōng　　**jǐ**
　　　　why　　is　　this　　type　　arrangement　　let　　ancient-bell　　**squeeze**

　　　　zài-wéi-lán-hé-gǒng-liáng-lǐ-miàn,　　xiá-xiǎo　　yòu　　jú-cù.
　　　　ZAI-rail-and-arched-girder-in　　narrow　　and　　cramped

　　　　Why is it arranged in such a way that the ancient bell is squeezed among the rails and arched girders, and (the space) is narrow and cramped.

Apart from pressing and encircling fictive motion expressions, there are other sentences with linguistic forms that express forceful contact and indicate implied fictive motion, as demonstrated in the following two sentences. What is factive in the scene depicted in (6-9) is that there are small islands located here and there on the sea, and what is fictive is that the islands are conceptualized as floating on the sea. An upward force is posited fictively onto the islands from the sea. Notice that the entailed movement of this implied fictive motion is actually encoded in the preceding clause explicitly (as indicated by the verb 洒落 [*sǎ-luò*, scatter-down]), and this fictive movement is an advent path through which the islands move onto the water. In the sentence in (6-10), the old pines growing on the mountain are conceptualized as hanging on the mountain. The state "hanging" implies that previously the old pines were not on the mountain, and that they have been moved to the mountain from somewhere else.

(6-9) 飞机从达累斯萨拉姆上空划过，透过舷窗能望见湛蓝的大海，零星的小岛像**洒落**的片片嫩叶，悠悠**漂浮**着。

        fēi-jī   cóng dá-lěi-sī-sà-lā-mǔ   shàng-kōng   huá-guò,   tòu-guò
        plane   from   Dar-es-Salaam   sky   pass   through

        xián-chuāng   néng wàng-jiàn zhàn-lán-de   dà-hǎi,   líng-xīng-de
        window   can   see   blue   sea   scattered

        xiǎo-dǎo   xiàng   **sǎ-luò**-de   piàn-piàn nèn-yè,
        small-island like   **scatter-down**-NOM   CL-CL   tender-leaf

        yōu-yōu **piāo-fú**-zhe.
        slowly   **float**-DUR

        (When) the plane flew over Dar es Salaam, through the window (I) could see the blue sea and the scattered small islands floating slowly like tender leaves that had fallen down.

(6-10) 不知黄山多古松，两株侧**挂**山肩的，一株仆倒山腰的。

        bù-zhī   huáng-shān   duō   gǔ-sōng,   liǎng-zhū
        not-know   Huangshan-Mountain rich-in   old-pine   two-CL

        cè-**guà**-shān-jiān-de,   yī-zhū-pū-dǎo-shān-yāo-de.
        side-**hang**-mountain-shoulder-NOM   one-CL-fall-mountain-waist-NOM

        (I do) not know the fact that the Huangshan Mountain is rich in old pines. Two are hanging on the shoulder of the mountain, and one is falling onto the waist of the mountain.

6.1.2 Leading fictive motion

The second new type of fictive motion expressions pertains to the description that an entity (usually related with route, such as roads and bridges) leads to a location. I label them as

"leading fictive motion expressions". Typical leading fictive motion expressions profile the linear route plus one end of the route-related entity. The end of the route-related entity with a linear range is usually a location to which it provides access. Table 6.2 below illustrates the conceptual features and semantic descriptions of leading fictive motion. The semantic descriptions will be discussed next and the conceptual features will be explained further after the illustration of examples.

Table 6.2　Features of leading fictive motion

conceptual features	semantic descriptions
Factive motion of some elements need not be present for that fictive effect.	Leading fictive motion sentences depict the connection of a route-related entity with a location. The route-related entity is conceptualized either as conducting the fictive motion, or providing possibility for other unmentioned entities to conduct the motion along it.
The fictively moving entity is either fictive or factive.	
The fictive effect is either observer-neutral or observer-based; and when it is observer-based, the observer is fictive, and it either moves or scans.	
What is conceived as fictively moving is either an entity or the observation of an entity.	

Leading fictive motion expressions are similar to access path expressions in terms of the values of the conceptual features, but they differ from each other in the purpose or function. Access paths focus on the description of some location in terms of a path following which some entity can reach the location, whereas leading paths emphasize on the possibility provided by an entity (usually route-related) to another entity that is located at one end of the first entity. To put it simply, it is how to get to one location that motivates an access path, and it is the availability of the route to one location that activates a leading path. The following sentences from (6-11) to (6-13) illustrate leading fictive motion expressions. All the three sentences delineate the extension of a route-related entity to its one end, and the route-related entity provides the possibility for other entities to follow the route.

(6-11)　印度门前是一条"国家大道"，直**通**远处的总统府。

　　　　yìn-dù-mén　　qián　shì　yī-tiáo　　"guó-jiā-dà-dào",　　zhí**tōng**
　　　　Indian-Gate　　front　is　one-CL　　national-boulevard　　directly-**lead**-to

　　　　yuǎn-chù-de　　zǒng-tǒng-fǔ.
　　　　distant　　　　Office-of-the-President

　　　There is a national boulevard in front of Indian Gate, leading directly to the Office of the President.

(6-12) 云天上，倒挂着一条盘旋迂回的石梯，曲曲折折，一直**通到**洞府的底层。

yún-tiān-shàng,	dào-guà-zhe	yī-tiáo	pán-xuán-yū-huí-de
cloud-sky-on	reversely-hang-DUR	one-CL	circling

shí-tī,	qū-qū-zhé-zhé,	yī-zhí	**tōng-dào**	dòng-fǔ-de
stone-staircase	zigzagging	all-the-way	**lead-to**	cave-ASSOC

dǐ-céng.
bottom

There is a circling and zigzagging stone staircase hung from above, and it leads all the way to the bottom of the cave.

(6-13) 迂回的小径**通往**碧绿的池塘。

yū-huí-de	xiǎo-jìng	**tōng-wǎng**	bìlǜ-de	chí-táng.
winding	small-path	**lead-to**	verdurous	pond

The small winding path leads to a verdant pond.

Instead of a linear route-related entity, some leading paths profile an entrance-like entity starting from which some other entity can follow a path and reach a location at the end of the path. This entrance-like entity provides the access to the path that starts from the entrance and ends at a specific location. This case is illustrated by the sentences in (6-14) and (6-15).

(6-14) 大型落地玻璃移门可以**通往**木质露台。

dà-xíng	luò-dì	bō-lí-yí-mén	kě-yǐ	**tōng-wǎng**	mù-zhì
large	fall-floor	glass-sliding-door	can	**lead-to**	wooden

lù-tái.
terrace

The large high glass sliding door can lead (you) to the wooden terrace.

(6-15) 从尼泊尔**通向**中国的一条最主要的口道，是一个峡谷。

cóng	níbó-ěr	**tōng-xiàng**	zhōng-guó-de	yī-tiáo	zuìzhǔ-yào-de
from	Nepal	**lead-to**	China-NOM	one-CL	most-important

kǒu-dào,	shì	yī-gè	xiá-gǔ.
way	is	one-CL	valley

One of the most important ways leading to China from Nepal is a valley.

As described above, leading paths prototypically concern about route-related entities following which some other entities can travel. There are marginal cases in which the linear entity being discussed does not provide affordance to motion. The extension and one end of a non-traversable extending entity are described in terms of a path following the extending entity to that end of it. It is implausible for such a path to be travelled by a living creature or

vehicle in reality. The following sentences demonstrate the conceptualization of non-traversable paths.

(6-16) 冰川**通向**大海的一端断裂了。

bīng-chuān   **tōng-xiàng**-dà-hǎi-de   yì-duān   duàn-liè-le.
glacier   **lead-to**-sea-NOM   one-end   break-PFV

The end of the glacier leading to the sea broke off.

(6-17) 绕了一大圈，我才看清几根凌空飞架的天线，**通往**嵌在高峡中间的小屋里。

rào-le   yī-dà-quān,   wǒ   cái   kān-qīng   jǐ-gēn
circle-PFV   a-big-circle   I   just see-clear   several-CL

líng-kōng-fēi-jià-de   tiān-xiàn,   **tōng-wǎng** qiàn   zài-gāo-xiá-zhōng-jiān-de
high-above-NOM   antenna   **lead-to**   inlay ZAI-valley-in-NOM

xiǎo-wū-lǐ.
small-cabin-in

(After) making a big circle, I saw several antennae high above leading to the small cabin nestled in the valleys.

Occasionally, both of the two ends of a linear route-related entity are profiled, as shown in the following two sentences. In this case, the focus is on the interconnection of two locations situated at two ends of the linear route-related entity.

(6-18) 五个洲子似乎都局促无可看，但长堤宛转**相通**，却值得走走。

wǔ-gè   zhōu-zi   sìhū dōu   jú-cù   wú-kě-kàn,   dàn   cháng-dī
five-CL island   seem all   narrow   nothing-to-see   but   causeway

wǎn-zhuǎn   **xiāng-tōng**,   què   zhídé   zǒu-zǒu.
winding   **connect**   indeed   worth   walk

The five islands are narrow and have nothing special, but the causeway connects them windingly and is worth walking on.

(6-19) 碉楼、城堡、寺庙之间有条条石阶路**相通**。

diāo-lóu,   chéng-bǎo,   sìmiào   zhī-jiān   yǒu   tiáo-tiáo
watchtower   castle   temple   between   have CL-CL

shíjiē-lù   **xiāng-tōng**.
stone-path   **connect**

The stone paths connect the watchtower, the castle, and the temple.

In contrast, some leading fictive motion sentences profile the path along the linear route-related entity while backgrounding the two ends of it. The emphasis of such expressions is on the positive possibility of a vehicle-like entity or living creature travelling along the linear route-related entity. The sentences in (6-20) and (6-21) illustrate this case.

(6-20) 二郎山盘山公路早已**贯通**隧道。

èr-láng-shān	pán-shān-gōng-lù	zǎo-yǐ	**guàn-tōng**	suì-dào.
Erlang-Mountain	hilly-highway	already	**run-through**	tunnel

The Erlang Mountain Highway has already run through the tunnel.

(6-21) 6 月 9 日上午，北京四环路最后一段……正式通车，标志着这条目前国内标准最高、规模最大的城市快速环路全线**贯通**。

6-yuè-9-rì	shàng-wǔ,	běi-jīng	sì-huán-lù	zuì-hòu
June-ninth	morning	Beijing	Fourth-Ring-Road	last

yí-duàn…	zhèng-shì	tōng-chē,	biāo-zhì-zhe	zhè-tiáo
section	officially	open-to-traffic	mean-DUR	this-CL

mù-qián	guó-nèi	biāo-zhǔn-zuì-gāo,	guī-mó-zuì-dà-de
currently	national	standard-highest	scale-largest-NOM

chéng-shì	kuài-sù	huán-lù	quán-xiàn	**guàn-tōng**.
city	high-speed	ring-road	all-line	**cut-through**

In the morning of 9th June, the last section of Beijing Fourth-Ring Road was officially open to public, meaning that this current high-speed city-ring-road with highest standard and largest scale in the country was completed.

Three sentences were collected that depict a leading path without using a verb related to 通 (*tōng*; connect/lead). Rather, verbs typically used to depict animals are employed, such as 引 (*yǐn*; lead/guide) and 带 (*dài*; bring). The linear route-related entities in such cases are endowed with an animate feature, and thus such sentences appear to be more poetic, as shown in the sentences in (6-22), (6-23), and (6-24).

(6-22) 橡树大道……或笔直或弧线，把河上吹来的凉风徐徐**引入**主人的豪宅。

xiàng-shù-dà-dào…	huò	bǐ-zhí	huò	hú-xiàn,	bǎ	hé-shàng
Oak-Avenue	either	straight	or	winding	BA	river-on

chuī-lái-de	liáng-fēng	xú-xú	**yǐn-rù**	zhǔ-rén-de	háo-zhái.
blow-come-NOM	cool-breeze	slowly	**lead-into**	host-ASSOC	mansion

Oak Avenue is sometimes straight and sometimes winding, leading the cool breeze blown from the river into the mansion of the host.

(6-23) 一座曲折如画的小石桥把我和孩子们**引到**三味书屋。

yī-zuò	qū-zhé-rú-huà-de	xiǎo-shí-qiáo	bǎ	wǒ	hé
one-CL	winding-like-picture-NOM	small-stone-bridge	BA	me	and

hái-zi-men	**yǐn-dào**	sān-wèi-shū-wū.
children	**lead-to**	Sanwei-Study

A small stone bridge that winds like the bridges in pictures leads me and the children to Sanwei Study.

(6-24) 每一条绿荫小路都可以将你**带到**一片阳光下的白色沙滩边上。

měi-yī-tiáo	lǜ-yīn	xiǎo-lù	dōu	kě-yǐ	jiāng	nǐ	**dài-dào**
every-CL	green-shade	small-road	all	can	BA	you	**bring-to**

yī-piàn   yáng-guāng-xià-de   bái-sè-shā-tān-biān-shàng.
one-CL   sunshine-under-NOM   white-beach-side-on

Every small road brings you onto the white beach under the sunshine.

Following the illustration of examples, we are in the position to summarize the conceptual features. Leading fictive motion does not depend on factive motion. The fictively moving entity is either fictive when it is an imagined entity moving on the path or the speaker's focus of attention that scans along the entity under discussion; or factive when it is a concrete road that is conceived as moving. The fictive effect is observer-neutral when a concrete road is conceptualized as moving; and it is observer-based when the speaker scans along the entity or imagines an abstract entity as moving. When the fictive effect is observer-based, the observer is a fictive one, and what is conceived as moving is the observation of an entity. When the fictive effect is observer-neutral, it is an entity that is conceived as moving.

6.1.3 Threading fictive motion

The third new type of fictive motion expressions describes the scene that there are several locations or entities along a linear entity as that the linear entity threads the locations situated along it. Thus they are termed "threading fictive motion expressions". Table 6.3 below illustrates the conceptual features and semantic descriptions of threading fictive motion. The explanation of conceptual features for threading fictive motion is the same as that of coextension paths discussed in Section 2.4.3 in Chapter 2.

Table 6.3   Features of threading fictive motion

conceptual features	semantic descriptions
Factive motion of some elements need not be present for that fictive effect.	Threading fictive motion is employed to describe the scene that several locations or entities are located along a long linear entity in the way that the long linear entity strings those locations or entities as a thread.
The fictively moving entity is itself factive.	
The fictive effect is either observer-neutral or observer-based; and when it is observer-based, the observer is fictive, and it either moves or scans.	
What is conceived as fictively moving is either an entity or the observation of an entity.	

Threading paths share the same conceptual features as coextension paths, but threading paths focus on the path locations along a linear entity, which is unlike coextension paths that pertain to the general extension of a linear entity. In addition, threading fictive motion expressions designate a particular manner of fictive motion, which not surprisingly is threading. The following two sentences illustrate threading fictive motion expressions. In the sentence in (6-25), the highway along which several countries are located is conceptualized as threading the countries together. In the sentence in (6-26), the reservoirs along the river are conceptualized as being threaded by it.

(6-25) 一条窄窄的公路环绕着湖的南、西、北三面……**串起**了七八个珍珠般的小村落。

yī-tiáo   zhǎi-zhǎi-de   gōng-lù   huán-rào-zhe   hú-de   nán, xī,
one-CL   narrow   highway   surround-DUR   lake-ASSOC   south west

běi   sān-miàn   **chuàn-qǐ**-le   qī-bā-gè   zhēn-zhū-bān-de
north   3-side   **thread-up**-PFV seven-eight-CL   like-pearl

xiǎo   cūn-luò.
small   village

A narrow highway surrounds the south, west, and north sides of the lake, and it also threads seven or eight small villages together as if they were pearls.

(6-26) 自吴起县境以降，红柳河进入毛乌素沙地，**串联起**了新桥水库、金鸡沙水库、大沟湾水库等诸多人工湖。

zì   wú-qǐ-xiàn-jìng yǐ-jiàng,   hóng-liǔ-hé   jìn-rù   máo-wū-sù-shā-dì
from   Wuqi-County   downwards   Hongliu-River   enter-into Mu-Us-Desert

chuàn-lián-qǐ-le   xīn-qiáo-shuǐ-kù,   jīn-jī-shā-shuǐ-kù,
thread-up-PFV   Xinqiao-Reservoir   Jinjisha-Reservoir

dà-gōu-wān-shuǐ-kù   děng   zhū-duō   rén-gōng-hú.
Dagouwan-Reservoir   and-so-on   many   artificial-lake

From Wuqi County downwards, the Hongliu River enters the Mu Us Desert, threading together the Xinqiao Reservoir, Jinjisha Reservoir, Dagouwan Reservoir and many other artificial lakes.

6.1.4 Fictive manner motion

Fictive manner paths pertain to the description of a factive movement of one entity in terms of a fictive movement performed by another entity with a different manner than the factive movement, in which the factive movement is the cause of the fictive movement. Table 6.4 below lists the conceptual features and semantic descriptions of fictive manner paths. The conceptual features of fictive manner paths are the same as those for pattern paths.

Table 6.4　Features of fictive manner motion

conceptual features	semantic descriptions
Factive motion of some elements must be present for that fictive effect.	Fictive manner paths pertain to the description of a factive movement of one entity in terms of a fictive movement performed by another entity with a different manner than the factive movement, in which the factive movement is the cause of the fictive movement.
The fictively moving entity is itself fictive.	
The fictive effect is observer-neutral.	
What is conceived as fictively moving is an entity.	

Fictive manner motion is involved in the descriptions of some meteorological phenomena, such as the coming of the night and the formation of fog, which are caused by the movement or change of entities on a macro scale. Some people may feel reluctant to treat descriptions of night and fog as fictive motion expressions since they have a relatively low degree of palpability. But similar to light, sound, smell, etc., the description of which are regarded as fictive motion expressions, night and fog are perceptible and can be physically experienced by human beings, though they are not as concrete and tangible as roads, trees, buildings, etc. For fictive manner paths involving meteorological phenomena, night and fog are conceptualized as a concrete and tangible object that moves in various manners other than the manner of the factive movement on the part of stars or weather conditions. The sentences from (6-27) to (6-31) depict the arrival of the night following different paths, and the sentences in (6-32) and (6-33) describe the forming of the fog as either rising or falling.

(6-27)　当夜色在高原上**突然降临**的时候，我没有丝毫心理准备。只见夜幕**疾速降落，有鹰的速度和牦牛的力量**。太阳就要落下，绝美的晚霞绵延到天际，沉沉暮色渐渐**吞噬**大地。

dāng	yè-sè		zǎi-gāo-yuán-shàng	**tū-rán**	**jiàng-lín**-de-
when	night-colour		ZAI-plateau-on	**suddenly**	**come-down**-NOM-

shíhou,	wǒ	méi-yǒu	sī-háo	xīn-lǐ-zhǔn-bèi.	zhǐ	jiàn
time	I	not-have	slight	mental-preparation	only	see

yè-mù	**jísù**	**jiàng-luò,**	**yǒu**	**yīng-de**	**sù-dù**	**hé**
night-curtain	**swiftly**	**drop**	**have**	**eagle-ASSOC**	**speed**	**and**

máo-niú-de	**lìliàng.**	tài-yáng	jiù-yào	luò-xià,	jué-měi-de
yak-ASSOC	**strength**	sun	shortly	fall-down	spectacular

wǎn-xiá	mián-yán-dào	tiān-jì	chén-chén	mù-sè	jiàn-jiàn
evening-glow	stretch-to	horizon	dark	twilight	gradually

tūn-shì	dà-dì
devour	ground

When the darkness suddenly came down onto the plateau, I was completely unprepared. I could only see that the curtain of night dropped swiftly with the speed of an eagle and the strength of a yak. The sun was setting. The spectacular evening glow stretched to the horizon. The heavy twilight gradually devoured the ground.

(6-28) 已经八点半了，夜色**刚刚落下来**，眼前是整片山谷的辽阔。

yǐ-jīng   bā-diǎn-bàn   le,   yè-sè   **gāng-gāng luò-xià-lái**,
already   half-past-eight   CRS   night-colour   **just   fall-down-come**

yǎn-qián   shì   zhěng-piàn   shān-gǔ-de   liáo-kuò.
eye-front   is   whole-CL   valley-ASSOC   vastness

(It is) already half past eight and the night just fell. In front of my eyes is the whole vast valley.

(6-29) 夜色就这样悄悄**笼**在了湖水之上。

yè-sè   jiù-zhè-yàng   qiāo-qiāo   **lǒng**   zài-le-hú-shuǐ-zhī-shàng.
night-colour   like-this   quietly   **cover**   ZAI-PFV-lake-on

The night then covers the lake quietly.

(6-30) 暮色**升腾起来**，夜市也越来越热闹。

mù-sè   **shēng-téng-qǐ-lái**,   yè-shì   yě   yuè-lái-yuè-rè-nao.
twilight   **rise-up**   night-market   also   more-and-more-lively

The twilight rose up, and the night market also became more and more lively.

(6-31) 不知什么时候，暮色已从纽约的每个墙角每棵树后**钻出**。

bù-zhī-shén-me-shíhòu,   mù-sè   yǐ   cóng   niǔ-yuē-de
not-know-when   twilight   already   from   New-York-ASSOC

měi-gè   qiáng-jiǎo   měi-kē   shù   hòu   **zuān-chū**.
every-CL   corner   every-CL   tree   behind   **come-out**

(I) don't know when the twilight came out from every corner of New York and from behind every tree.

(6-32) 薄雾又静静地在湖面上**升起**，透过它，仍能望见天上疏朗的星光。

báo-wù   yòu   jìng-jìng-de zài-hú-miàn-shàng   **shēng-qǐ**,   tòu-guò   tā,
mist   again   quietly   ZAI-lake-surface-on   **rise-up**   through   it

réng   néng   wàng-jiàn   tiān-shàng   shū-lǎng-de   xīng-guāng.
still   can   see   sky-on   sparse-bright   star-light

The mist rises up from the lake quietly. Through it, (I) can still see the sparse but bright light of the stars in the sky.

(6-33) 雨并没有来，倒**降下**大雾，一片迷茫。

yǔ   bìng   méi-yǒu   lái,   dào   **jiàng-xià**   dà-wù,
rain   surprisingly   not   come   but   **fall-down**   heavy-fog

yī-piàn   mí-máng.

one-CL   vast-and-hazy

Surprisingly the rain doesn't come, but the heavy fog falls, and it is vast and hazy.

6.1.5 Macro frame-relative motion

As the name suggests, this type of fictive motion can be considered as a non-prototypical type of frame-relative motion, and it is listed here as one new type of fictive motion due to the absence of attention paid to it in the literature. This type of fictive motion concerns, on the one hand, the factive situation that stars, including the earth, are moving relative to each other in the universe; and on the other hand, the fictive conceptualization from the perspective of the entities on the earth that the earth is stationary and all the other stars are moving around the earth. I call this type *macro frame-relative motion*[28].

Table 6.5   Features of macro frame-relative motion

conceptual features	semantic descriptions
Factive motion of some elements must be present for that fictive effect.	Macro frame-relative motion expressions are used to describe the movement of stars relative to the earth.
The fictively moving entity is itself factive.	
The fictive effect is observer-based, and the observer moves.	
What is conceived as fictively moving is an entity.	

As shown in Table 6.5, macro frame-relative motion expressions have the same values of conceptual features as frame-relative fictive motion expressions in that factive motion is indispensable and that the fictively moving entity is factive. Similar to frame-relative motion, macro frame-relative motion expressions are also observer-based, with the "observer" defined in a macro sense. If some living creature is based on the sun or other stars and perceives the earth, then what moves would be the earth. This reflects Talmy's argument that the basic state for us is stationariness (Talmy, 2000a, p. 133). The difference between frame-relative motion and macro frame-relative motion lies in the fact that the latter occurs at such a macro level that we seldom consider ourselves as being involved in a relative motion event. The following sentences depict the relative location of the sun and the earth in terms of the movement on the part of the sun relative to entities on the earth.

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[28] Some people may disagree to treat this type of linguistic expressions as fictive motion by arguing that if so, then everything would be in fictive motion. In my opinion, this group of sentences can be considered involving fictive motion only if we adopt a macro reference frame, and that's why it is labelled as *macro frame-relative motion*. All the other types of fictive motion take the earth as the reference frame, and if we just take the earth as the reference frame, it is not the case that everything is in motion.

(6-34) 远山凹处，红日正**沉**。

yuǎn-shān	āo-chù,	hóng-rì	zhèng	**chén**.
distant-mountain	concave-place	red-sun	DUR	**sink**

At the concave part of the distant mountain the red sun is sinking.

(6-35) 当我顺下眼光，看见自己鼻梁上的红色的时候，知道太阳已**出**水面了。

dāng	wǒ	shùn-xià	yǎn-guāng,	kàn-jiàn	zìjǐ	bíliáng-shàng-de
when	I	drop-down	eye-light	see	self	nose-bridge-on-NOM

hóng-sè	de-shíhou,	zhī-dào	tài-yáng	yǐ	**chū**	shuǐ-miàn	le.
redness	NOM-time	know	sun	already	**exit**	water-surface	CRS

When I dropped down my eyes and saw the redness on the bridge of my nose, I knew that the sun had already gone out of the water.

(6-36) 热烘烘的太阳**往上爬**，**爬上**了白塔，照进了我们的家。

rè-hōng-hōng-de	tài-yáng	**wǎng-shàng-pá**,	**pá-shàng**-le
warm	sun	**upwards-climb**	**climb-onto**-PFV

bái-tǎ,	zhào-jìn-le	wǒ-men-de	jiā.
white-pagoda	shine-into-PFV	our	house

The warm sun climbed upwards and onto the white pagoda, and it shone into our house.

(6-37) 夕阳已**走到**山村，它的光芒并不离开，依旧穿过云阵照着八达岭的群山。

xī-yáng	yǐ	**zǒu-dào**	shān-cūn,	tā-de	guāng-máng
setting-sun	already	**walk-to**	village	its	light-ray

bìng-bù	líkāi,	yī-jiù	chuān-guò	yún-zhèn	zhào-zhe	bā-dá-lǐng-de
not	leave	still	cross	cloud	shine-DUR	Badaling-ASSOC

qún-shān.
mountains

The setting sun has already walked to the village. Its light rays do not leave. They still cross clouds and shine onto the mountains at Badaling.

The sentence in (6-38) depicts our perceptual experiences of the stars as their rising and falling. In this sentence, the relative movement between the earth and the stars is overlooked.

(6-38) 和日月一样，群星也在**东升西落**。

hé	rìyuè	yíyàng,	qún-xīng	yě	zài	**dōng-shēng-xī-luò**.
with	sun-moon	similar	stars	also	DUR	**east-rise-west-fall**

Similar to the sun and the moon, the stars are also rising from the east and falling to the west.

To sum up, there are altogether five new types of fictive motion identified based on the data collected. This is not to say that these five new types of fictive motion plus the established six

types proposed by Talmy compose an exhaustive list of fictive motion expressions in Modern Standard Chinese. Rather, the identification of new types of fictive motion lends evidence to the conclusion that our cognitive ability of conceptualizing static entities in terms of dynamic linguistic forms is great. There are patterns underlying fictive motion expressions, but there are also singular and creative fictive motion expressions. The employment of fictive motion expressions in general reflects aspects of our cognition, and different patterns of fictive motion reveal more detailed cognitive mechanisms underlying each type of fictive motion.

6.1.6 Type II radiation paths and observer-neutral frame-relative motion

Apart from the above five new types of fictive motion, two subtypes of the established types of fictive motion were also proposed in Chapter 4 (a subtype of radiation paths) and Chapter 5 (a subtype of frame-relative motion) respectively. The subtype of radiation paths, namely, Type II radiation paths, shares all the conceptual features with other emanation paths. It is listed separately because examples within this type are seldom paid attention to. As analyzed previously in Chapter 4, unlike the most frequently discussed types of radiation path expressions where the light source is either an illuminant (such as the sun) or is conceptualized as an illuminant (such as the moon), the light source of a type II radiation path is an entity with a high reflecting capacity, from which the light is reflected onto another entity. In contrast to type II radiation paths, observer-neutral frame-relative motion differs from observer-based frame-relative motion with respect to one aspect, i.e., the fictive effect is observer-neutral rather than observer-based. The entities in relative movement depicted with expressions involving observer-neutral frame-relative motion are entities independent of the observer.

6.2 Relationships between Types of Fictive Motion

This section focuses on what the picture of the categorization of fictive motion looks like after adding the fictive motion data of Modern Standard Chinese and the relationships borne by different types of fictive motion.

Table 6.6 below illustrates all the types of fictive motion including the ones proposed by Talmy, which are also observed in Modern Standard Chinese, and the newly identified types.

Table 6.6   Established & newly identified fictive motion types

established types of fictive motion	newly identified fictive motion

emanation paths	implied advent paths
pattern paths	leading fictive motion
advent paths	threading fictive motion
access paths	fictive manner motion
frame-relative motion	macro frame-relative motion
coextension paths	Type II radiation paths
	observer-neutral frame-relative motion

The newly identified fictive motion types are related to the established ones mainly by sharing conceptual features and functions with them. I will next demonstrate how types of fictive motion are related regardless whether they are established ones or newly identified ones.

6.2.1 Frame-relative motion & macro frame-relative motion

I begin with the most straightforward pair, i.e., frame-relative motion and macro frame-relative motion. Previous research studying frame-relative motion expressions focuses on examples describing fictive motion experienced by a specific observer with the earth as the common reference point, in which the specific observer usually has awareness with regard to this fictive frame-relative motion. Expressions involving macro frame-relative motion are also ubiquitous, but people are seldom conscious of the relative motion involved. It takes some expert knowledge to realize that, counter-intuitively, all the stars are in relative motion rather than that the earth is the centre with all the other stars circling around it. If we zoom out and take a perspective from which all the stars can be included, we can observe that the earth and the sun are in relative motion. Due to our self-centeredness, stars other than the earth are fictively conceptualized as moving with the earth as the reference point, and the development of science and technology did not prevent such usages. Even very knowledgeable persons, such as physicists and geographers, can still naturally produce and understand expressions involving macro frame-relative motion. In this way, the difference between frame-relative motion and macro frame-relative motion lies only in the scale of entities under description, and also, as illustrated in Section 6.1.5, they share the same conceptual features. Therefore, macro frame-relative motion can be considered as a subtype of frame-relative motion.

6.2.2 Access paths & leading paths

The next pair to be discussed consists of access paths and leading paths. Based on the conceptual features, leading paths are similar to access paths but they are not identical.

Leading paths can be interpreted as observer-neutral, and what is conceived as fictively moving can be an entity; while access paths must be observer-based, and accordingly, what is conceived as fictively moving must be the observation of an entity. This difference mainly lies in the fact that what is encoded as fictively moving in a leading path expression is a route-related entity that provides the path, whereas such an entity is absent in access path expressions. They also have differences in other ways apart from the conceptual features. The first difference is associated with the functions of the two types of fictive motion. As discussed previously in Section 6.1.2, access paths are involved in expressions that focus on the path from one location to another while leading paths are typically concerned with the availability of a route-related entity to a location at the entity's end. The second difference is related to the first one. Since the path in leading fictive motion is provided by a specific route-related entity, it is relatively simple and usually a straight one; but there is no such restriction on access paths, for which the path between the two locations can be rather complicated. Access paths and leading paths do not share identical conceptual features and they also have different functions and linguistic features, and thus they are taken as two separate types of fictive motion.

6.2.3 Fictive manner paths & pattern paths

The next pair to be considered is pattern paths and fictive manner paths. They share the same functions and conceptual features. Both pattern paths and fictive manner paths involve some factive movement as the cause of the fictive movement, and the factive movement is represented in terms of the fictive manner of the fictive movement. In this sense, fictive manner paths can accommodate pattern paths. I propose pattern paths be a subtype of fictive manner paths. I also suggest treating fictive manner motion as a more encompassing and open type of fictive motion, which, apart from pattern paths and meteorological fictive motion, may be enriched by other subtypes.

6.2.4 Coextension paths, threading paths, advent paths & implied advent paths

Last but not least, coextension paths, advent paths, threading paths, and implied advent paths will be compared as a group. Among these four types of fictive motion, coextension paths and threading paths share the same conceptual features, and advent paths and implied advent paths share the same conceptual features. These two pairs are related in that the conceptual

features shared by coextension paths and threading paths include the cases specified by the conceptual features shared by advent paths and implied advent paths. For advent paths and implied advent paths, the fictive motion effect is observer-neutral, and what is conceptualized as fictively moving is an entity; for coextension paths and threading paths, it is either observer-neutral or observer-based, and what is conceptualized as fictively moving is either an entity or the observation of an entity.

Although possessing similar conceptual features, these four types of fictive motion have different semantic descriptions. As discussed in Chapter 3, coextension paths focus on the extension of one dimension of an entity, which is depicted in terms of a path following the extension of that dimension. A coextension path can be characterized with the Source location, the Goal location, and the Path location. Advent paths, on the other hand, focus on the location where an entity (regardless of its shape) arrives at as a whole following a fictive path (regardless of its configuration), and thus advent paths are typically characterized with the Goal location. In contrast to coextension paths and advent paths, threading paths are concerned with the Path locations threaded by a long linear entity, through which the extension of a particular section of the long linear entity with the Path locations is represented. The implied advent paths relates most closely to advent paths by profiling the final state of an unexpressed fictive motion. Advent paths are involved when an entity is conceptualized as arriving at its current location; while implied advent paths employ verbs expressing forceful contact that depict a static state but entail preceding motion or motion afterward. In this way implied advent paths will be considered as a non-prototypical case of advent paths. Threading paths will be treated as a special group under coextension paths.

6.3 Current Picture of the Categorization of Fictive Motion

The established types and the newly identified types are integrated as shown in Table 6.7 below. Emanation paths and the subtypes generally remained unchanged, apart from that a scarcely discussed type of radiation paths is proposed, i.e., type II radiation paths. The category of advent paths are extended to include both the encoded advent paths and implied advent paths. Frame-relative motion is enriched by adding macro frame-relative motion and also dividing the established frame-relative motion into observer-based ones and observer-neutral ones. Pattern paths are incorporated into a more general type of fictive motion, namely, fictive manner paths, which further encompass meteorological fictive manner paths

and other possible ones. Access paths are maintained as before. Coextension paths are added in with threading paths. Leading paths are added to the categorization as a new type.

Table 6.7   Revised categorization of fictive motion

emanation paths	orientation paths	prospect paths
		alignment paths
		demonstrative paths
		targeting paths
		line of sight
	radiation paths	type I radiation paths
		type II radiation paths
	shadow paths	
	sensory paths	visual paths
		auditory paths
		olfactory paths
		gustatory paths
		tactile paths
advent paths	encoded advent paths	
	implied advent paths	
frame-relative motion	human-scale frame-relative motion	observer-based frame-relative motion
		observer-neutral frame-relative motion
	macro frame-relative motion	
fictive manner paths	pattern paths	
	meteorological fictive manner paths	
	other possible types	
access paths		
leading paths		
coextension paths (with threading paths as a special group)		

CHAPTER 7 DISCUSSION & THEORETICAL IMPLICATIONS

The aim of this thesis is to understand the nature of fictive motion expressions in Chinese. The term *fictive motion* has frequently been used to refer to only one specific type of fictive motion in previous studies, the conclusions of which can only be applied to that type. Examples include Matsumoto (1996c), Matlock (2004a), Wang (2008), Mishra & Singh (2010), etc. A preliminary investigation reveals that the underlying cognitive mechanisms and the linguistic features of fictive motion expressions vary, depending on which type is being discussed, and thus the categorization of fictive motion expressions is the precondition of an analysis. In view of this, the primary task in this study is to make a categorization. There are different criteria in categorizing fictive motion expressions (Langacker, 2005, p. 175; Matlock, 2004a, pp. 230-233; Matsumoto, 1996c, p. 204). We adopt Talmy's categorization system (2000a, pp. 100-175) in this thesis because it is the most developed and encompasses a comprehensive range of types, and, in addition, it is widely accepted among linguists (Deng, 2013; Kemmer, 2014; Slobin, 2009; Takahashi, 2000, 2001). Talmy established a categorization of six types of fictive motion based on English. It is found in this study that all the six established types of fictive motion are observable in Modern Standard Chinese. In addition to the six types, some of the data cannot be accommodated by the established types and are treated as new types of fictive motion.

The six established types of fictive motion observed in Chinese are illustrated and analysed from the perspective of Cognitive Linguistics. Two specific frameworks are employed, namely, motion event theory (Talmy, 2000b) and Conceptual Metaphor Theory (Lakoff & Johnson, 1980). In terms of the motion event theory, the participants, including the Figure, Ground, Agent, etc., and the semantic elements encoded in the verbs are explored. With regard to CMT, specific metaphoric mappings involved in fictive motion expressions are examined.

In the following sections, the results of the analysis are summarized and discussed based on the participants involved in fictive motion expressions, the types of verbs employed, and the metaphoric mappings identified. The discussion not only focuses on specific types of fictive motion, but also covers fictive motion in general.

7.1 Participants

Table 7.1 below is a summary of the types of participants encoded in different categories of fictive motion expressions[29]. The participants include the Figure, the Ground, the Agent, and the Reason. The Ground is a general term for the Source Location, the Path Location, the Goal Location, the General Location, and Direction. The participants in different types of fictive motion are different.

Table 7.1   Participants in different types of fictive motion

coextension paths	Figure; Ground (Source Location, Path Location, Goal Location, General Location)
prospect paths	Source Location; Path Location; Goal Location
type I radiation paths	Figure; Agent; Ground (Source Location, Path Location, Goal Location)
type II radiation paths	Figure; Agent; Ground (Source Location, Goal Location)
shadow paths	Figure; Agent; Ground (Path Location, Goal Location)
visual paths	Figure (Experiencer/Experienced); Agent; Ground (Source Location, Path Location, Goal Location [Experiencer/Experienced], Direction)
auditory paths	Figure (Experienced); Agent; Ground (Source Location, Path Location [including the Experiencer], Goal Location [including the Experiencer], General Location)
olfactory paths	Figure (Experienced); Agent; Ground (Source Location, Path Location [including the Experiencer], Goal Location [including the Experiencer], General Location)
advent paths	Figure; Ground (Source Location, Path Location, Goal Location, General Location)
frame-relative motion	Figure; Ground (Source Location, Path Location, Goal Location)
pattern paths	Figure; Ground (Source Location, Path Location, Goal Location, General Location); Reason
access paths	Source Location; Path Location; Goal Location

Among the participants in a motion event, Figure and Ground are the ones most frequently encoded. They occur in all categories of fictive motion except for prospect paths and access paths where the fictive mover (Figure) is not expressed explicitly. In addition to Figure and Ground, other types of participants include the Agent and the Reason, the encoding of which depends on the intrinsic features of different types of fictive motion. For example, the Agent is encoded for radiation paths, shadow paths, and all the sensory paths (visual paths, auditory

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[29] For the tables in this chapter, the illustration of emanation paths is divided into its sub-types and even sub-sub-types due to the heterogeneity within emanation paths, including prospect paths, radiation paths, shadow paths, visual paths, auditory paths, and olfactory paths.

paths, and olfactory paths), where the active-determinative principle (Talmy, 2000a, p. 117) applies to the structuring of the fictive motion event. That is to say, the flow of energy is a crucial factor in the organization of the relevant fictive motion events. In this case, the Agent, as the highest energy point (even higher than the Figure) (Talmy, 2000a, p. 334), occupies the subject position. The participant Reason is sometimes specified in pattern paths, in which the fictive movement is the result of some kind of related factive movement. The Reason encoded in pattern paths is some direct or indirect event associated with the factive movement.

The Figure and Ground in fictive motion expressions have features that are different from those in translational motion events. The Figure in fictive motion expressions can either be fictive entities[30] or factive entities. The fictive entities include light, shadow, visual scenes, sound, smell, some meteorological entities (such as less palpable entities like night and fog), and even a cluster of entities conceptualized as one entity; the factive entities encompass geographical entities, architectural structures, plants, animals, etc. In contrast, the Ground in almost all cases is a factive physical entity in space, such as geographical entities, architectural structures, and persons. It is normal to describe the location or path of a factive entity with other comparable factive entities as reference points, but it takes additional conceptualizing and expressive effort to characterize a fictive entity in terms of factive entities. For fictive motion expressions, the strategy is to conceptualize and depict the fictive Figural entity as a concrete factive one capable of moving. For example, the intangible and invisible smell can only be perceived by the nose, but linguistically, smell is conceptualized as a concrete, tangible, and moving object whose path is characterized by physical entities, as shown in the example in (7-1). Another example is an entity composed of several discrete physical objects that is conceptualized as an integral one, as shown in the example in (7-2). The discrete objects do not form a Gestalt entity in themselves; it is our mind that conceptualizes them as moving as one integral entity.

(7-1)　新酒还焖在热乎乎的锅灶上，酒酿的**香气**早就**蹿出**了**酒坊**。

xīn-jiǔ	hái	mèn	zài-rè-hū-hū-de-guō-zào-shàng,	jiǔ-niàng-de-
new-wine	still	simmer	ZAI-hot-stove-on	wine-

xiāng-qì	zǎo-jiù	**cuān-chū**-le	**jiǔ-fāng**.
aroma	already	**jump-out**-PFV	**winery**

The new wine is still simmering on the hot stove, (but) its aroma has already jumped out of the winery.

(7-2)　　这儿也是大伯公，那儿也是大伯公，大大小小的土地庙一路盖过去。

　　zhè-er　yě　shì　dà-bó-gōng,　　　　　nà-er　yě　　shì
　　here　　again　is　Tua-Pek-Kong-Temple　there　again　is

　　dà-bó-gōng,　　　　　dà-dà-xiǎo-xiǎo-de　**tǔ-dìmiào**　yílù
　　Tua-Pek-Kong-Temple　big-and-small　　　 **temple**　all-the-way

　　gài-guò-qù…
　　build-across-go

Here is a Tua-Pek-Kong-Temple, and there is a Tua-Pek-Kong-Temple. Temples of various sizes were built along (something).

Table 7.2 below illustrates the semantic domains in which entities are frequently observed as being described with fictive motion expressions. Apart from prospect paths and access paths where the fictive mover is not encoded explicitly in the sentence; and radiation paths, shadow paths, auditory paths, and olfactory paths where the fictive mover is usually a fictive entity, all the other types of fictive motion describe entities generally from a certain set of semantic domains, including geographical entities, architectural structures, meteorological entities, plants, animals, etc., among which large-scale entities, namely, geographical entities and architectural structures, account for a large proportion of the factive entities described with fictive motion expressions. Taking all types of fictive motion into consideration, it can be observed from the table that fictive entities (including multiple entities that are conceptualized as a Gestalt entity; non-palpable entities, such as light, shadow, sound, smell; and some meteorological entities[31]) and large-scale entities (mainly geographical entities and architectural structures) dominate the types described with fictive motion expressions. In Table 7.2, the numbers following each type of semantic domain are the token and percentage of the occurrence of that domain described with the corresponding fictive motion. The grey areas indicate either fictive entities or large-scale entities. The numbers following each type of fictive motion show the total percentage of fictive entities and large-scale entities among all types of entities described with the corresponding fictive motion.

Table 7.2　Semantic domains serving as the Figure in different types of fictive motion

	fictive mover (Figure) in fictive motion sentences		
coextension	geographical entities	architectural	plants (120/8.7%)

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paths (89.6%)	(645/46.5%)		structures (570/41.1%)	
	meteorological entities (28/2.0%)		animals (23/1.7%)	
prospect paths (NA)	no explicit fictive mover			
radiation paths (100%)	fictive entities: light/light source			
shadow paths (100%)	fictive entities: shadow			
visual paths (91.4%)	geographical entities (51/25.6%)	architectural structures (41/20.6%)	fictive entities: vision (49/24.6%)	fictive entities: general scenery (32/16.1%)
	animals (9/4.5%)	fictive entities: light & colour (9/4.5%)	plants (4/2.0%)	others (4/2.0%)
auditory paths (100%)	fictive entities: sound			
olfactory paths (100%)	fictive entities : smell			
advent paths (83.6%)	geographical entities (58/41.1%)	architectural structures (56/39.7%)	plants (21/14.9%)	meteorological entities (4/2.8%)	others (2/1.4%)
frame-relative motion (96.4%)	geographical entities (49/45.0%)	architectural structures (41/37.6%)	fictive entities: general scenery (11/10.1%)	meteorological entities (4/3.7%)	plants (4/3.7%)
pattern paths (90.7%)	geographical entities (65/55.6%)	architectural structures (34/29.1%)	plants (8/6.8%)	fictive entities: shadows & images (7/6.0%)	animals (3/2.7%)
access paths (NA)	no explicit fictive mover			

Next I will elucidate the special properties of the Figural entities in fictive motion expressions.

It is noticeable from Table 7.2 that fictive entities and large-scale factive entities are so dominant in percentage among all the entities expressed as the Figure that we can say the Figure in fictive motion expressions is more like the perceptual Ground. According to previous psychological studies on Figure and Ground, the prototypical Figure is bounded in shape, smaller in size, movable; and the prototypical Ground is unbounded in shape, larger in

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size, and unmovable (Göksun, Hirsh-Pasek, & Golinkoff, 2009, p. 208; Harrower, 1936, p. 409; Rubin, 1958, p. 202). Both fictive entities and large-scale entities are more Ground-like that are frequently employed to depict the setting. Fictive entities, such as light, darkness, and some meteorological entities, are unbounded and more diffuse, and thus are more likely to play the role of being the background in general and non-fictive expressions. Large-scale entities like geographical entities and architectural structures have different features from human-scale entities (Egenhofer & Mark, 1995, pp. 4-5; Mark, 1997, p. 311). Large-scale entities are more place-like and are encoded as where-nouns whereas human-scale entities are more thing-like and are expressed as what-nouns (Landau & Jackendoff, 1993, pp. 224-225; Rybka, 2014, p. 41). It is found that what-nouns tend to play the role of the Figure while where-nouns typically function as the Ground (Landau & Jackendoff, 1993, pp. 224-225; Rybka, 2014, p. 41). Similar to fictive entities, many factive entities described in fictive motion expressions are more likely to be conceptualized as the Ground in a certain scene. In this way, it can be said that the Figure in fictive motion expressions is more Ground-like.

Based on the scenes described with fictive motion expressions, it is often difficult to decide which entity should be encoded as the Figure and which one the Ground since they are all Ground-like entities. When there is the need and intention to linguistically choose one Ground-like entity as the focus of attention, i.e., the Figure, a fictive motion expression is an appropriate choice. Fictive motion expressions, which do not encode static scenarios faithfully, have features that make the Ground-like entity more Figure-like. The most obvious feature is consistent with the essence of fictive motion expressions, namely, to conceptualize a static entity as movable. Since being more movable is one of the most important characteristics of a Figural entity, this static entity will become more Figure-like. This is true for all fictive motion expressions, regardless of whether the entity treated as the Figure is more factive or fictive. Another related feature is to conceptualize the linguistic Figure as a thing-like entity. This feature is associated with the fact that the Figural entity tends to be bounded in shape. In this way, no matter whether the entity described as the Figure is a fictive entity or a place-like factive entity, it is described as a concrete object and thus more Figure-like.

Through the above two strategies, not only can the perceptually ambiguous two entities be encoded as the linguistic Figure and Ground, in some cases, the perceptually canonical Figure entity and Ground entity are even reversed linguistically (Kemmer & Ma, 2015). In other words, fictive motion expressions are so expressive that they can reverse the perceptually

canonical Figure and Ground by endowing the perceptual Ground with the moving feature and encoding it as a what-noun, and expressing the perceptual Figure as a where-noun. The examples from (7-3) to (7-5) illustrate Figure-Ground reversal in fictive motion sentences.

(7-3) 远处是重重叠叠、连绵不断的山峰……**我们的车子奔跑**着，**远山**也像一起一伏的**跟着赛跑**。

| yuǎn-chù | shì | chóng-chóng-dié-dié, | lián-mián-bú-duàn-de |
| in-the-distance | is | overlapping | continuous |

| shān-fēng… | **wǒ-men-de** | **chē-zi** | **bēn-pǎo-zhe**, |
| mountain-peak | **our** | **car** | **run-DUR** |

| **yuǎn-shān** | yě | xiàng | yī-qǐ-yī-fú-de | **gēn-zhe** | **sài-pǎo**. |
| **distant-mountain** | also | like | rise-fall | **follow-DUR** | **race** |

In the distance there are overlapping and continuous mountain peaks. Our car is running, and the mountains in the distance seem to be racing with (the car) in the manner of rising and falling regularly.

The sentence in (7-3) describes a scene containing distant mountains and a car. Normally, the car is more likely to be chosen as the Figure and the mountain, the Ground, because the car is smaller, moving, and bounded, whereas the mountains are huge, static, and relatively unbounded. However, in (7-3), the allocation of Figure and Ground differs from the expected assignment. The mountain, a more setting-like noun, is not only conceptualized as a moving object, but also expressed as moving even in the presence of a better candidate, namely, a car. The car is expressed, on the other hand, as the reference point with respect to which the mountains fictively move. Thus, in this case, we can say that the Figure and the Ground are reversed.

(7-4) **海水**是那么无穷的广大、深远，**它拥抱**着大大小小的无数的**岛屿**。

| **hǎi-shuǐ** | shì | nà-me | wú-qióng-de | guǎng-dà | shēn-yuǎn, | **tā** |
| **sea-water** | is | so | endlessly | wide | deep | **it** |

| **yōng-bào**-zhe | dà-dà-xiǎo-xiǎo-de | wú-shù-de | **dǎo-yǔ**. |
| **embrace**-DUR | big-small | countless | **island** |

The sea is endlessly wide and deep. It is embracing countless islands of different sizes.

The scene described with the example in (7-4) involves several islands in the sea. The islands are normally chosen as the perceptual Figure due to their smaller size, boundedness, and probably vividness, and the sea is typically chosen as the Ground since it is larger, unbounded, and more setting-like. However, this fictive motion expression encodes the scene in the opposite manner. The sea is conceptualized as a moving object that extends its arms

and embraces the islands. The islands, on the other hand, are construed as the Ground with respect to which the sea moves.

(7-5)　不知什么时候，暮色已从纽约的每个**墙角**每棵**树后**钻出。

bù-zhī-shén-me-shí hòu,	**mù-sè**	yǐ	**cóng**	niǔ-yuē-de
not-know-when	**twilight**	already	**from**	New-York ASSOC

měi-gè	**qiáng-jiǎo**	měi-kē	**shù hòu**	zuān-chū.
every-CL	**corner**	every-CL	**tree behind**	come-out

(I) don't know when the twilight has come out from every corner of New York and from behind every tree.

The sentence in (7-5) describes New York in darkness. It is self-evident that darkness is more setting-like because it is ambient and diffuse, and we cannot interact with it in a physical or palpable manner. In this sentence, interestingly, the twilight is conceptualized as a concrete physical entity, which moves with respect to the reference points of corners and trees. Again, it is clear that, the perceptually canonical Figure and Ground are reversed in this example.

It is probably no coincidence that fictive entities and large-scale entities occur frequently in fictive motion expressions. Section 7.3 on metaphoric mappings discusses this issue further.

7.2 Verbs

For the description of verbs in fictive motion expressions, the analysis strategy is to identify the verb and determine what types of semantic elements it encodes. In the next two sections, the semantic elements encoded and the verbal predicate patterns observed are summarized and discussed.

7.2.1 Semantic elements in verbs

In this study, the types of semantic elements are categorized with respect to information about path, manner, and what we can call *general motion*, which is instantiated by verbs encoding little path or manner information, such as 延伸 (*yán-shēn*; extend) and 铺展 (*pū-zhǎn*; spread). It can be observed from Table 7.3[32] that general motion verbs, path verbs, and manner verbs occur in all types of fictive motion except for prospect paths where verbs

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[32] The layout of Table 7.3 is that the heading row contains different types of fictive motion, and the first column contains all the types of verbs employed in fictive motion expressions. The first five rows illustrate the proportion of each main type of verbs in different types of fictive motion, including general motion verbs, path verbs, manner verbs, manner & path verbs, and general motion & path verbs. The grey section from the sixth row down illustrates the proportion of different types of manner verbs in different types of fictive motion.

encoding general motion information are absent. Coextension paths are also special in that, apart from the three basic types of semantic information, combinations of manner plus path information, and general motion plus path information are found. As far as manner information is concerned, three types of specific manner information are frequently observed, namely, manner associated with animals, liquid, and force. Those three specific domains are discussed in Section 7.3 on conceptual metaphors in fictive motion expressions. Other types of manner verbs, such as wind verbs (e.g. 刮; *guā*; blow), opening verbs (开; *kāi*; open), facing verbs (面; *miàn*; face), coverage verbs (覆盖; *fù-gài*; cover), radiation verbs (照; *zhào*; shine), and vibration verbs (震荡; *zhèn-dàng*; vibrate), occur only in one or two types of fictive motion. Default verbs are defined as the canonical verbs to describe the Figure under discussion (such as *radiate* in the description of light, *look* employed in sensory paths, and *build* to describe architectural structures), which indicates that the fictive motion sense is not conveyed through the employment of the default verb, but other dynamic linguistic forms. The verbs in the miscellany group are the singular and creative instances that cannot be grouped with other verbs.

Table 7.3   Types of verbs and their proportions in different types of fictive motion

		coextension paths	prospect paths	radiation paths	shadow paths	visual paths	auditory paths	olfactory paths	advent paths	frame-relative motion	pattern paths	access paths
general motion verbs		33.6%		0.8%	2.1%	5.1%	45.9%	4.6%	23.1%	12.5%	39.7%	1.1%
path verbs		49.7%	40.1%	24.6%	8.3%	35.6%	11.4%	21.4%	40.4%	43.9%	31.2%	86.0%
manner verbs		7.3%	59.9%	74.7%	89.6%	59.3%	42.8%	74.0%	36.5%	43.9%	29.1%	12.9%
manner & path verbs		9.3%										
general motion & path verbs		0.1%										
manner verbs	animal verbs	3.5%	1.8%	3.5%	10.4%	4.0%	4.4%	5.3%	11.5%	7.5%		
	liquid verbs	1.6%		15.5%	6.3%	0.7%	4.4%	10.7%	5.1%	6.5%		
	force verbs	1.1%		7.5%	54.2%	11.6%	3.9%	16.8%	8.3%	3.7%	15.6%	
	default verbs	0.5%	0.6%	41.4%		28.0%	2.2%	16.0%				
	wind verbs						12.2%	22.9%				
	opening verbs		3.0%									
	looking verbs		31.1%									
	facing verbs		23.4%									
	coverage verbs			2.0%								
	radiation verbs				12.5%	11.6%						
	vibration verbs						13.1%					
	miscellany	0.6%		4.7%	6.3%	3.3%	2.6%	2.3%	11.5%	26.7%	13.5%	

Although the main verb types used in different types of fictive motion are similar, their proportion varies greatly. For coextension path expressions, verbs encoding general motion information and path information make up a high proportion while verbs expressing manner information only account for 7.3%. Compared with other types of fictive motion expressions, coextension path expressions employ fewer manner verbs, suggesting a lower degree of poetic flavour. Verbs in prospect paths encode only two types of information, namely, path information and manner information, with manner information being nearly 20% higher than path information. Manner information is often encoded in radiation paths and shadow paths. It can be seen that default verbs are the dominant verbs in radiation paths. This indicates that the high proportion of manner verbs in radiation path expressions does not mean that the description of light is more poetic than other entities. The same is also true for visual path expressions and olfactory path expressions where manner verbs occur relatively frequently. Subtypes of emanation paths, including prospect paths, radiation paths, shadow paths, visual paths, auditory paths, and olfactory paths, encode manner information to a higher degree than other types of fictive motion expressions. All types except shadow paths employ default verbs, which are manner verbs but do not contribute to the dynamicity of the sentence. Advent paths, frame-relative motion, and pattern paths employ more manner verbs than coextension paths and access paths, but fewer than emanation paths. It can also be observed that these three types of fictive motion employ a higher proportion of creative verbs that do not fall into a natural grouping. The dominant information encoded in verbs in access path expressions is, naturally enough, path. Access paths pertain to the description of a route, and they seldom explicitly express a particular fictive mover. The route described with access paths can be traversed by any person or vehicle. The absence of a Figure in access paths makes it impossible to apply metaphors or use manner verbs.

Different kinds of manner information are expressed in verbs of different types of fictive motion expressions. The three occurring most often are manner associated with animals, liquid, and force. Prospect paths, pattern paths, and access paths do not have all the three kinds of manner information, and for all the remaining types of fictive motion, verbs associated with animals, liquid, and force are identified. As mentioned above, default verbs do not add dynamicity or poetic flavour to the sentence, and the fictive motion sense is expressed by other grammatical elements in the same sentence. Other manner verbs are related to some particular context and thus are restricted to one or two types of fictive motion expressions. For example, wind verbs are used to describe auditory and olfactory paths due to

the agentive effect of wind on sound and smell; radiation verbs are employed in shadow paths and visual paths because of the close relation between light and the two types of fictive motion; opening verbs, looking verbs, and facing verbs are observed in the description of prospect paths because these verbs are helpful to depict the setting of an entity with a planar front. Verbs in the miscellany category usually exhibit relatively creative and poetic linguistic usages. For prospect and access paths, no such creative verbs are observed. As discussed in Section 7.1, prospect path expressions and access path expressions do not explicitly encode a fictive mover. The absence of a fictive mover may prevent the use of poetic expressions. Creative verbs occur rarely in coextension path expressions. For the subtypes of emanation paths (except for prospect paths), verbs in the miscellany group take a higher proportion than coextension paths, but a lower proportion than advent paths, frame-relative motion, and pattern paths. Creative use of verbs occur most in fictive motion expressions involving frame-relative motion. Frame-relative motion expressions are the most embodied ones directly related to the simultaneous factive motion on the part of a factive entity, usually the observer or some vehicle where the observer is located. Sometimes the observer is even fooled by the seemingly moving surrounding entities and thus thinks that the surrounding entities are really moving.

The manner condition proposed by Matsumoto (1996c, p. 194), which states that only manner information associated with path can be expressed in fictive motion expressions, is not applicable to fictive motion as a whole. Since the manner condition (together with the path condition) is mainly based on coextension paths, whether they can be applied to all types of fictive motion expressions is not explored by Matsumoto. From Table 7.3 it can be observed that the percentage of verbs encoding manner information can be very high for some types of fictive motion, such as radiation paths, shadow paths, and olfactory paths. Although some manner verbs are the default verbs to describe the entity under discussion, there are indeed metaphorical uses of verbs, among which verbs from the animal domain, the liquid domain, and the force domain are frequently borrowed. For example, the fictive movement of smell is described with verbs like 推 (*tuī*; push), 蹿 (*cuān*; jump), 溢 (*yì* overflow), etc. None of these verbs contributes to the expression of path information. The encoding of manner information is least for access paths and coextension paths. However, even for coextension path expressions based on which the manner condition is proposed, manner information unrelated to path can occasionally be encoded (Ma, 2014). Manner verbs that do not contain any path

information, such as 涌 (*yǒng*; gush), 赛跑 (*sài-pǎo*; race), and 切 (*qiē*; cut), are observed in coextension path sentences.

7.2.2 Verbal predicate patterns in fictive motion expressions

As reviewed in Section 2.2.5, it is hypothesized that in manner-salient languages, namely, satellite-framed languages, fictive motion is less salient, and that fictive motion plays a more important role in verb-framed languages than in satellite-framed languages (Stosic & Sarda, 2009). This hypothesis is supported by Chinese fictive motion data in terms of two aspects. One is the employment of verbal predicate patterns from ancient Chinese (a verb-framed language) in fictive motion expressions in modern Chinese (a satellite-framed language); the other is the rough negative correlation between the proportion of ancient verbal predicate patterns and the encoding of manner information. Manner information is expressible in fictive motion expressions, but it is encoded less frequently compared to path information. Modern Chinese can only provide limited patterns of verbal predicates for fictive motion expressions due to its relative richness in manner verbs. When there is the need to use fictive motion expressions, ancient verbal patterns are sometimes resorted to. Since manner information is less salient in ancient Chinese, the employment of ancient verbal predicate patterns allows the absence of manner information.

It is surprising to find that verbal predicate patterns normally used in ancient Chinese are frequently observed in fictive motion expressions, and for some types the proportion can be quite high. Table 7.4 below shows the types and frequencies of verbal predicate patterns in different types of fictive motion expressions. As stated in Section 2.3.3 in Chapter 2, eight types of verbal predicate patterns in fictive motion expressions are generally identified, and they are compound verbs; verb-complement constructions; disyllabic words[33]; monosyllabic verbs; *adverb+monosyllabic verb* constructions; *nouns of locality+monosyllabic verb* constructions; Chinese idioms; and *AA ér B* constructions[34]. In the last but one row of Table 7.4, the total percentage of compound verbs and verb-complement constructions is compared with the total percentage of all the remaining six types of verbal predicate patterns. This comparison is made because compound verbs and verb-complement constructions have

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[33] As a reminder, disyllabic words are composed of two characters that bind together to form one morpheme

[34] As explained before, in an *AAérB* construction, *AA* is a disyllabic adverbial element, *B* is a monosyllabic verb, and *ér* is a function word that indicates that the movement expressed by *B* is modified by the word *AA*.

developed in modern Chinese (C. N. Li & Thompson, 1981, p. 68; Lv, 2002a, pp. 399-421; Shi, 2002) and all the other patterns are inherited from ancient Chinese (T. Li, 2005, pp. 24-25; Shao, 2007; L. Wang, 1958, pp. 337-340; 1981b, p. 446; J. Zhang, 2011, pp. 125-140).

It can be seen from Table 7.4 that although the verbal predicate patterns employed in different types of fictive motion are similar, their frequencies vary. Consequently, the proportion of compound verbs and verb-complement constructions and that of the remaining six types of verbal predicate patterns depend on which type is under consideration. Coextension path expressions exhibit a neutral case for which modern verbal predicate patterns take up equal proportion to ancient ones. Two patterns occur more in coextension path sentences compared with other types of fictive motion, namely, disyllabic verbs and *noun of locality+monosyllabic verb* constructions. Visual path expressions and access path expressions are similar to coextension path expressions with visual path expressions having slightly more modern verbal predicate patterns whereas access path expressions using slightly more ancient verbal predicate patterns. Chinese idioms have a high proportion in visual path expressions and contribute a lot to the total proportion of ancient patterns. Monosyllabic verbs are dominant in access path sentences and also occur most in access path sentences compared with other types of fictive motion. Prospect path sentences exhibit an extreme case in which ancient verbal predicate patterns are employed much more frequently than modern patterns, which is largely due to the contribution from *adverb+monosyllabic verb* constructions. For all the other types of fictive motion, modern verbal predicate patterns prevail over ancient ones.
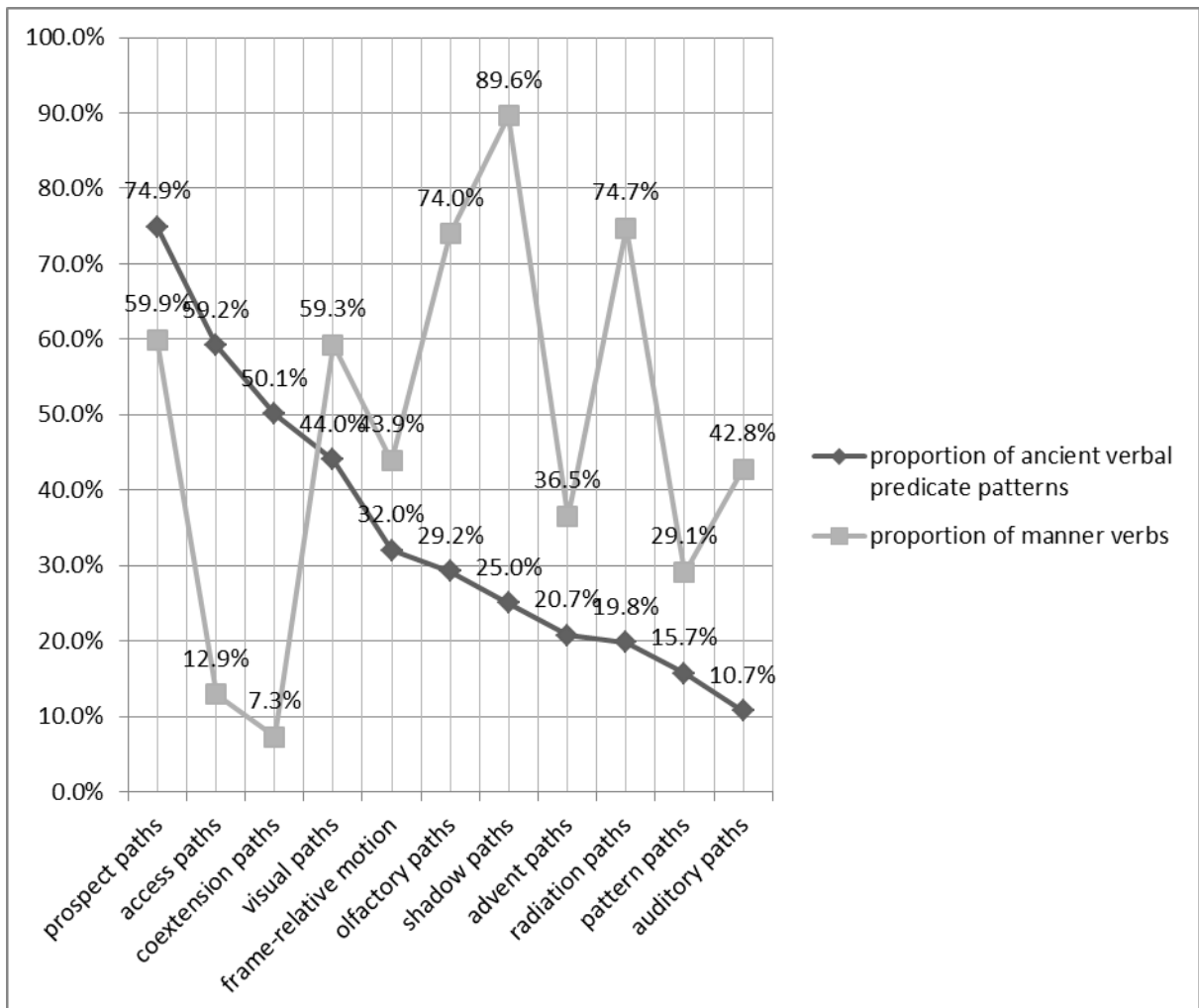
Table 7.4 Verbal predicate patterns in different types of fictive motion

	coextension paths	prospect paths	radiation paths	shadow paths	visual paths	auditory paths	olfactory paths	advent paths	frame-relative motion	pattern paths	access paths
compound verbs 伸展 (*shēn-zhǎn*; extend)	523 (30.6%)	42 (25.2%)	69 (17.3%)	8 (16.7%)	55 (19.9%)	45 (20.0%)	55 (41.0%)	31 (20%)	22 (20.2%)	73 (52.1%)	33 (33.7%)
verb-complement constructions 刺穿 (*cì-chuān*; pierce-through)	332 (19.4%)	0	252 (63.0%)	28 (58.3%)	100 (36.1%)	156 (69.3%)	40 (29.9%)	92 (59.4%)	52 (47.7%)	45 (32.1%)	7 (7.1%)
disyllabic verbs 绵延 (*mián-yán*; stretch)	230 (13.5%)	0	0	0	0	2 (0.9%)	2 (1.5%)	0	0	3 (2.1%)	0
monosyllabic verbs 入 (*rù*; enter)	195 (11.4%)	35 (21.0%)	55 (13.8%)	10 (20.8%)	48 (17.3%)	17 (7.6%)	10 (7.5%)	19 (12.3%)	19 (17.4%)	5 (3.6%)	51 (52.0%)
adverb+ monosyllabic verb constructions 斜射 (*xié-shè*; obliquely-radiate)	180 (10.5%)	77 (46.1%)	22 (5.5%)	2 (4.2%)	7 (2.5%)	0	9 (6.7%)	4 (2.6%)	2 (1.8%)	7 (5.0%)	3 (3.1%)

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	coextension paths	prospect paths	radiation paths	shadow paths	visual paths	auditory paths	olfactory paths	advent paths	frame-relative motion	pattern paths	access paths
noun of locality+ monosyllabic verb constructions 南达 (*nán-dá*; south-arrive)	126 (7.4%)	3 (1.8%)	0	0	0	0	0	2 (1.3%)	0	5 (3.6%)	3 (3.1%)
Chinese idioms 拔地而起 (*bá-dì-ér-qí*; rise-abruptly-from-the-ground)	70 (4.1%)	6 (3.6%)	0	0	66 (23.8%)	2 (0.9%)	17 (12.7%)	3 (1.9%)	7 (6.4%)	1 (0.7%)	0
A A ér B constructions 奔涌而出 (*bēn-yǒng-ér-chū*; surging-exit)	54 (3.2%)	4 (2.4%)	2 (0.5%)	0	1 (0.4%)	3 (1.3%)	1 (0.8%)	4 (2.6%)	7 (6.4%)	1 (0.7%)	1 (1.0%)
ratio (modern vs. ancient)	50%-50.1%	25.2%-74.9%	80.3%-19.8%	75%-25%	56.0%-44.0%	89.3%-10.7%	70.9%-29.2%	79.4%-20.7%	67.9%-32.0%	84.2%-15.7%	40.8%-59.2%

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The employment of ancient verbal predicate patterns indicates that the lexicalization patterns of fictive motion in some cases are similar to those of ancient Chinese. As noted in Section 2.4.1 in Chapter 2, Chinese has been developing from a verb-framed language to a satellite-framed language, that is, ancient Chinese tends to encode path information in the verb and manner information in other grammatical forms, while modern Chinese tends to encode manner information in the verb and path information in the verb complement. Based on the observation of various languages that satellite-framed languages are better able to encode manner information than verb-framed languages, manner information should therefore be encoded more in modern Chinese than ancient Chinese. It is then expected that the employment of ancient verbal predicate patterns in fictive motion expressions should go with a decrease in the encoding of manner information.

Figure 7.1 Correlation between ancient verbal predicate patterns and the encoding of manner information

Figure 7.1 above illustrates the proportion of ancient verbal predicate patterns and the proportion of manner verbs for different types of fictive motion. The types of fictive motion on the horizontal axis are arranged in descending order according to the proportion of ancient verbal predicate patterns. For some types of fictive motion expressions, such as access paths, coextension paths, visual paths, frame-relative motion, olfactory paths, shadow paths, and radiation paths, there is an approximate tendency that the more ancient verbal predicate patterns are employed, the less manner information is encoded in the verb. Prospect paths, advent paths, pattern paths, and auditory paths are explainable exceptions. The proportion of ancient verbal predicate patterns and that of manner verbs do not form a perfect negative correlation. This is because, on the one hand, verbal predicates in ancient Chinese can also encode manner information, such as the verb in *adverb+monosyllabic verb* constructions, Chinese idioms, and the verb in *AA 而B* constructions; and on the other hand, it is also possible for disyllabic verbal predicates in modern Chinese not to encode manner information, such as compound verbs expressing general motion and verb-complement constructions where the verb encodes path information instead of manner information. For example, it can be observed from Table 7.3 that auditory path expressions and pattern path expressions are the two types of fictive motion that employ general motion verbs (modern pattern but encoding no manner information) the most, and consequently, manner information is not a very frequent semantic element in the verbs despite the low proportions of ancient verbal predicate patterns. Another point is that, as a modern construction, verb-complement constructions occupy 69.3% in auditory path expressions, but 44.9% is contributed to by verb-complement constructions containing 传 (*chuán*; transmit) as the verb, which does not encode any manner information. Similarly, advent path expressions also employ many verb-complement constructions and compound verbs in which not so much manner information is encoded. For prospect paths, the *adverb+monosyllabic verb* construction takes up the largest proportion. Although it is an ancient pattern, the verb in this construction frequently encodes manner information, such as the verb 望 (*wàng*; look) in 相望 (*xiāng-wàng*; look-at-each-other) and 隔海相望 (*gé-hǎi-xiāng-wàng*; look-at-each-other-across-the-sea), which are entrenched expressions to describe the opposite locations of two geographical entities. For all the other seven types of fictive motion expressions, namely, access paths, coextension paths, visual paths, frame-relative motion, olfactory paths, shadow paths, and radiation paths, the employment of ancient verbal predicate patterns tends not to invite the encoding of manner information.

Both the relatively frequent employment of ancient verbal predicate patterns and the rough negative correlation between the use of ancient verbal predicate patterns and the encoding of manner information support the hypothesis that fictive motion occurs more in verb-framed languages than in satellite-framed languages.

7.3 Metaphoric Mappings

Fictive motion expressions borrow dynamic linguistic forms associated with the motion domain to depict static spatial scenarios. From the perspective of Conceptual Metaphor Theory, the schema of translational motion events is used to structure locative motion events. This applies to all types of fictive motion expressions. However, more specific metaphoric mappings appear when different types of fictive motion are examined separately, as shown in Table 7.5 below. It can be observed from the table that specific metaphoric mappings are not given for some types of fictive motion, such as shadow paths, access paths, advent paths, frame-relative motion, and pattern paths. Shadow paths and access paths are too few in number (47 examples and 38 examples respectively) to be analysed from the perspective of CMT. In addition to being low in number, access paths seldom employ manner verbs as shown in Table 7.3. For advent path expressions, frame-relative motion expressions, and pattern path expressions, manner verbs from the animal domain, liquid domain, and force domain are indeed identified, but the types of Figure in these three types of fictive motion are varied and difficult to label using a single term. Therefore, they are not analysed in terms of metaphoric mappings. However, the identification of manner verbs from the same three more specific domains is still considered as evidence to show the special status of the three domains. For coextension path expressions and most types of emanation path expressions, the corresponding Figure is described as an entity in the animal domain, liquid domain, and force domain. Only animal metaphors are identified for prospect path expressions, and for visual path expressions, more types of specific metaphors are identified.

Table 7.5 Metaphoric mappings in fictive motion expressions

coextension paths		A SPATIALLY EXTENDED OBJECT IS AN ANIMAL; A SPATIALLY EXTENDED OBJECT IS LIQUID; A SPATIALLY EXTENDED ENTITY IS A FORCEFUL ENTITY
emanation paths	prospect paths	AN ENTITY WITH A FACE-TYPE FRONT IS AN ANIMAL
	radiation paths	LIGHT IS LIQUID; LIGHT IS AN

		ANIMAL; LIGHT IS A SWORD-LIKE THING
sensory paths	**visual paths**	THE GAZE/LINE OF SIGHT IS A CONCRETE OBJECT; THE GAZE/LINE OF SIGHT IS A STRETCHY LINE; THE EYE IS A CONTAINER; THE PERCIEVED ENTITY IS AN ANIMAL
	auditory paths	MUSIC IS LIQUID; SOUND IS A FORCEFUL ENTITY
	olfactory paths	SMELL IS LIQUID; SMELL IS AN ANIMAL; SMELL IS A FORCEFUL ENTITY

The target domains described with fictive motion expressions are static subdomains within either the space domain or the perception domain, and they are structured in general by one subdomain within the space domain, namely, the physical motion domain. Based on the specific metaphoric mappings in Table 7.5 and manner verbs in advent path expressions, frame-relative motion expressions, and pattern path expressions, three specific domains are frequently employed as the source domain to build the fictive motion conceptualization, i.e., the animal domain, the liquid domain, and the force domain. The spatial domain and the perception domain are claimed to be the most fundamental domains since our sensorimotor experiences are the most fundamental experiences of human beings (Lakoff & Johnson, 1980). However, based on our data, some subdomains of the spatial domain and perception domain are not embodied and basic enough to be described with non-metaphoric language; instead, a satisfactory description of those domains requires borrowing linguistic forms from other domains. Regarding these, two questions need to be clarified. First, why do the conceptualizations of some sensorimotor experiences require the contribution from other domains? Second, why the motion domain and the three more specific domains, namely, the animal domain, the liquid domain, and the force domain, are frequently employed in structuring static spatial scenes through fictive motion? In the following discussion, I will address these two questions.

7.3.1 The inadequacy of some sensorimotor experiences

The first question amounts to why the phenomenon "fictive motion" occurs. The main theories explaining the cognitive mechanisms behind fictive motion include the mental scanning view (Langacker, 1986, 2005), Conceptual Metaphor Theory (Lakoff & Johnson, 1980), Conceptual Integration Theory (Fauconnier & Turner, 2002), and metonymy

(Caballero, 2006). However, these theories actually focus more on how fictive motion expressions are produced than why they are produced. Experimental studies (Matlock, 2004b, 2010) support the hypothesis that the processing of fictive motion expressions stimulates motion in the brain, but such studies could provide neither explanation nor further hypotheses of the motivation behind the existence of fictive motion expressions. To be sure, some theories are coupled with motivations regarding why the corresponding cognitive operation takes place. For example, under the framework of CMT, it is claimed that the metaphoric mapping from the source domain to the target domain happens because the source domain is more fundamental and experience-based than the target domain, so that the source domain contributes to the comprehension of the target domain (Lakoff & Johnson, 1980). This explanation does not go well with the case of fictive motion expressions since the target domains here (such as static spatial domain and perception domain) are also fundamental to human beings. Talmy (2000a, pp. 171-172) proposes a cognitive bias towards dynamism. He claims that the linguistic cases of describing a static entity as a dynamic one far outnumber cases where dynamic entities are described as static ones (Talmy, 2000a, p. 171). Further, in some cases, static entities are more frequently depicted linguistically as dynamic entities than as static ones (ibid). The proposal of cognitive bias towards dynamism regarding fictive motion expressions is promising yet partial. Some static scenarios are constantly represented as static and seldom as dynamic. Such examples can readily be enumerated, such as a mug on a table; a sofa in a room; and a tree in the yard. In contrast, some static entities in space evoke motion easily, and a dynamic description seems to be the most economical way to represent them. Path-like entities such as roads and mountains are such examples. It is necessary to specify in which cases static entities are represented fictively as dynamic ones more than they are represented factively as static ones. It is found that the overarching goal of CIT explained by Fauconnier and Turner (2002, p. 312) works harmoniously with the motivation of fictive motion expressions, i.e., to reduce the non-human-scale entities to human-scale entities. I will explain next why the entities described with fictive motion expressions are not on the human-scale.

Going back to the types of entities being described with fictive motion expressions in Section 7.1, we find that most of them are large-scale entities or non-palpable entities. They are indeed entities in either the spatial domain or the perception domain, but unlike human-scale objects, they are not the types of entities that we can manipulate or interact with physically or easily. We seldom have direct interactions with geographical entities; we cannot easily cause

changes to large-scale entities; we do not normally interact with fictive non-palpable entities, such as light, or sound, or smell, in a palpable and physical manner; and our interaction with non-palpable entities cannot provide us with a scientific understanding of them. Based on acquired knowledge, we are able to have a scientific understanding of these large-scale entities and non-palpable entities. But apart from the acquired understanding of those entities, we do have a naïve understanding that is established based on daily experiences and also language input. It is difficult to say to what extent language is influenced by naïve thinking in its origin, but language input should contribute to children's naïve theories that in turn will influence their language use. Although overridden by the acquired understanding when we are involved in scientific thinking, our naïve understanding is still easily accessible, unconsciously resorted to, and reflected through language. I will begin the illustration from the naïve understanding of non-palpable entities, including light, shadow, and sensory experiences.

Non-physical-object concepts, such as activities, emotions, ideas, and visual fields, are widely approached through ontological metaphors by conceptualizing them as physical objects based on our daily direct experience with them (Lakoff & Johnson, 1980, pp. 25-32). It is proposed that the most initial knowledge about abstract entities is substance-based (Reiner, Slotta, Chi, & Resnick, 2000). Constant experiences of material substance in the course of daily life builds the so-called "substance schema", with which people naively understand more abstract and difficult concepts (Reiner et al., 2000, p. 3). This substance schema is instantiated well through fictive motion expressions describing light, shadow, and perceptions, as discussed below.

It is found that children naively conceptualize light as a thing rather than a process (Hardman & Riordan, 2014, p. 645; Reiner et al., 2000, pp. 13-17). In some cases, light is understood as something similar to liquid (Hardman & Riordan, 2014, p. 645). It is observed from the data of radiation path expressions that light is constantly described as a concrete object that moves from the light source to somewhere where the light hits. One example is the frequent use of the noun phrase 光线 (*guāng-xiàn*; light-line; light ray), which depicts light as rays. As analysed in Chapter 4 on emanation paths, sometimes light is described as liquid by employing verbs like 涌 (*yǒng*; gush), 洒 (*sǎ*; spill), 流 (*liú*; flow), etc. Similar to light, shadow is conceptualized by children as a quasi-material object (Piaget, 1930, p. 181) that is caused by the presence of something instead of the absence of light (Feher & Meyer, 1992, p.

517; Feher & Rice, 1988, p. 637). The reified shadow is released onto its current location by the object that is hit by light (Feher & Meyer, 1992, p. 517; Feher & Rice, 1988, p. 637). The naïve understanding of shadow is consistent with shadow path expressions, which constantly describe shadow as a concrete object that moves from the shadow-bearing object to its current location. Sometimes light in shadow paths plays the role of an Agent. Scientific explanation of vision depends on the understanding of the interaction between light and objects, but even students who believe that light is reflected by objects cannot always associate this process with vision (Anderson & Smith, 1986, p. 20). In agreement with what is found from fictive motion expressions concerning visual perception, there are two main models underlying children's understanding of vison, i.e., something is moving from the eyes to the object and something is moving from the object to the eyes (Anderson & Smith, 1986, p. 20 & 22), and there is a third model occurring occasionally that involves the movement from both the object and the eyes simultaneously (Hardman & Riordan, 2014, p. 647). In the naïve model where light moves from the object to the eyes, the image of the object is conceived as a corporeal entity picked up by the eyes (Driver, Squires, Rushworth, & Wood-Robinson, 1994, p. 43; Fetherstonhaugh & Treagust, 1992, p. 660; Heywood, 2005, p. 1456). This is consistent to the frequent conceptualization of the visual field as a physical entity, namely, a container (Lakoff & Johnson, 1980, p. 30). The substance schema is also partly applied to the conceptualization of sound by children (Mazens & Lautrey, 2003, p. 172), middle-school students (Eshach & Schwartz, 2006, p. 745), and even tertiary students (Linder & Erickson, 1989, p. 498; Wittmann, Steinberg, & Redish, 2003, p. 1003). In alignment with auditory path expressions, sound is conceptualized as occupying a definite place and is thus locational, and it can move from one place to another (Eshach & Schwartz, 2006, p. 752). Even some experts employ the substance schema in explaining sound as something that is moving (Eshach & Schwartz, 2006, p. 760).

It is interesting that some of children's naïve models are similar to ancient scholars' understanding. For example, ancient scholars held both the two main models about how vision happens. Euclid explained vision in terms of visual rays emitted by the eyes while Alhazen believed that it was light rays that went from the object to the eyes (Andersson & Kärrqvist, 1983, p. 388). Also, some ancient philosophers, such as Lucretius, held the naïve view that sound consisted of corporeal particles (Eshach & Schwartz, 2006, p. 753). Similar to visual perception where the visual stimulus emitted an "external elementary fire", the Greek philosopher Empedocles also believed that auditory perception and olfactory

perception were caused by the reaching of the sound to the ear and the smell to the nose (Andersson & Kärrqvist, 1983, p. 387).

The relationship between language and naïve models is complex. It is true that adult language influences children's understanding of concepts. Children are exposed to linguistic environment where non-palpable entities, such as light, shadow, and perception, are frequently described with fictive motion expressions, which provide them with a false impression and contribute to their naïve logic. However, apart from linguistic input, children also draw hypotheses and conclusions based on their own experience and observation (Anderson & Smith, 1986, p. 6; Feher & Rice, 1988, p. 637; Gentner, 1982, p. 5). The naïve models formed must be able to account for their observation and experience. Any element within the model must be modified or corrected if it appears contrary to their experience or observation. The naïve models, as the result of both language input and experience and observation, will in turn influence their way of thinking and use of language. Some students are reluctant to abandon their naïve models even after having acquired the scientific model (Andersson & Kärrqvist, 1983, p. 400). It is not a coincidence that the naïve models held by children are parallel to the representation of those entities created by ancient thinkers. Children's naïve understanding of non-palpable entities, adults' difficulty in rejecting the naïve models formed when they were young, and the naïve interpretation proposed by ancient scholars all support the idea that these notions are difficult to comprehend (Andersson & Kärrqvist, 1983, p. 387). Naïve models are more sensible to us than scientific models that are acquired consciously under the instruction of teachers. These naïve models exert powerful influence onto our way of conceptualizing and expressing the world. The way we describe non-palpable entities may also be influenced by the naïve models built when we were young.

Similar to non-palpable entities, geographical entities also contribute greatly to the entities frequently described with fictive motion expressions. Children's and other non-experts' naïve understanding of geographical entities related to this study is not studied much, but geographers have worked within the area called "naïve geography" (Baik, Bala, Hadjarian, & Pachowicz, 2004; Egenhofer & Mark, 1995). Geographical entities encompass naturally formed geographical entities such as mountains, rivers, sea, and valleys, as well as geographical entities formed in association with human beings, such as roads, architectural structures, bridges, and cities, and the components of those entities (Egenhofer & Mark, 1995; Mark, Smith, & Tversky, 1999; Smith & Mark, 1998). It is interesting that geographical entities defined by geographers are just the types of entities described frequently with fictive

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motion expressions. Geographical entities are labelled as large-scale entities, geographical entities, spatial entities, etc., in contrast to human-scale entities, manipulable entities, table-top entities, etc., which refer to movable and smaller objects with which human beings have direct contact with in daily life. For convenience, I will use large-scale entities and human-scale entities to refer to these two types of entities.

Ontologically speaking, large-scale entities are different from human-scale entities. The most obvious difference between large-scale entities and human-scale entities is size, apart from which large-scale entities normally are located on the earth and thus cannot move freely while human-scale entities are movable either on their own or under the influence of other entities (Mark et al., 1999, p. 287; Smith & Mark, 1998, p. 310). The factors playing a smaller role in the definition of human-scale entities, such as size, colour, and location, contribute greatly to the definition of large-scale entities (Mark et al., 1999, p. 287; Smith & Mark, 1998, pp. 313-314). For example, size and scale matter for the distinction of geographical entities, such as pond, lake, sea, and ocean (Smith & Mark, 1998, p. 309). The ways of interaction between human beings and these two types of entities are also different. In most cases, human-scale entities can be perceived by our eyes with one or a few glances holistically (Mark, 1997, p. 311), whereas large-scale entities, such as mountains, rivers, and seas, cannot be perceived with a few glances (Smith & Mark, 1998, p. 310). We either look at them from a map or imagine them in our mind. Human-scale entities can be manipulated by human beings relatively easily while the interaction between large-scale entities and human beings is quite limited (Egenhofer & Mark, 1995, p. 4). Sometimes we explore large-scale entities by moving around within them (ibid).

The lack of manipulation of and interaction with large-scale entities make it relatively difficult for us to perceive, conceive, and talk about large-scale entities directly. Similar to non-palpable entities that are frequently treated as palpable entities, large-scale entities also need to be reduced to human scale-entities. One way of achieving this is to conceptualize and describe large-scale entities as human-scale entities that are capable of moving and acting like human-scale entities. Three domains of space are proposed in (Mark, 1992, pp. 105-108), including haptic spaces, pictorial spaces, and transperceptual spaces. The haptic space is the most fundamental one that is built on our sensorimotor experiences (ibid, p. 105); the pictorial space is composed of generalizations over remotely-sensed perceptions with sight as the predominant one and sound and odour as peripheral ones (ibid, p. 106); in contrast to the haptic and pictorial spaces as perceptual spaces, the transperceptual space is similar to large-

scale space, within which the structure of an entity cannot be perceived from one viewpoint. Among the three spaces, the pictorial space is partly comprehended in terms of the haptic space, and the transperceptual space is partly conceptualized in terms of concepts and structures from the pictorial and haptic spaces (ibid, p. 105). It can be concluded that our knowledge about human-scale entities is basic and acquired through sensorimotor experiences, whereas our knowledge about large-scale entities are partly structured in terms of human-scale entities. This reduction from non-human-scale entities to human-scale ones echoes the motivation of CIT (Fauconnier & Turner, 2002, p. 202), though the intrinsic features of the entities described with fictive motion expressions are not discussed much in CIT.

Now we are in the position to answer the first question, that is, why entities from the sensorimotor domain, which is fundamental to us, require structures from other domains. We answer this question by saying that entities described with fictive motion expressions are a special group in the spatial domain and perceptual domain. They are understood naively and metaphorically because we do not have human-scale and physical interactions with them, and the naïve understanding is based on experiences more directly related to us. It is in this sense that the static spatial domain and perception domain are structured and expressed in terms of other domains. This explanation makes CMT compatible with fictive motion in that we understand less palpable domains in terms of more palpable ones.

7.3.2 The rationality in the employment of the motion and more specific domains

The answer to the second question directly follows the first one. Since we do not have many direct interactions with non-palpable entities and large-scale entities, it is relatively difficult for human beings to conceptualize and describe them. One compensation strategy for the difficulty involved in dealing with them is to resort to other familiar domains and use structures that already exist in these familiar domains to organize non-palpable and large-scale entities.

All fictive motion expressions indicate that the motion domain is such a familiar domain. Movement is a critical component of daily experiences and is one of the most prominent elements in our cognition. New-born babies show preference to moving stimuli compared with static ones with identical appearance (Slater, Morison, Town, & Rose, 1985). It is

widely acknowledged that movement is so fundamental and pervasive that human beings conceptualize, understand, and express many abstract domains in terms of motion (Johnson, 1987, p. 114; Kemmer, 2014, p. 85; Lakoff, 1987, p. 278; Radden, 1996, pp. 423-425). The motion schema, namely, the SOURCE-PATH-GOAL schema (or PATH schema), is a perfectly qualified image schema to function as the source domain in metaphoric mappings due to its pervasiveness in daily experiences, its well-structure, its simple structure, etc. (Johnson, 1987, p. 116; Lakoff, 1987, p. 278). This schema is kept constant across all the abstract target domains that use the motion domain as the source domain. Entities involving some type of change can be described in terms of undergoing movement under the mapping CHANGE OF STATE IS CHANGE OF LOCATION (Radden, 1996, p. 425). If movement is considered as the change of location, then locational change is more fundamental than other types of change, such as temporal change, change of emotional state, or change of health condition. The motivation for comprehending more abstract types of change in terms of locational change, which is more concrete, is to achieve human-scale understanding because we, as human beings, have most direct and palpable experiences and perceptions towards physical movement. This overarching goal also applies to fictive motion expressions.

In the next several paragraphs I will discuss how the use of each type of fictive motion expressions achieves human-scale understanding. Coextension paths and access paths are similar in the sense that both of them involve mental scanning (Langacker, 1986). Coextension paths and access paths are not appropriate to describe an entity that we can see with our naked eyes from one viewpoint with one glance. Entities described with these two types of paths are usually long and extending ones, the visually perception of which requires the change of focus of attention, including at least the moving of the visual attention, or the turning of the head, or even the movement of the body. Traversable entities, such as roads and bridges, are functionally related to motion. We either move along them or see others doing so. These embodied experiences with traversable entities facilitate the dynamic conceptualization of them. It is proposed that the dynamic conceptualization of long and extending entities has been extended from traversable entities to non-traversable ones (Yang, 2013). In cases where no physical movement is involved, it is the change of attentional focus that is conceptualized as the change of location along the entity. Even if when we are just processing coextension path sentences without seeing a concrete object, mental scanning is still involved (Matlock, 2010). The focus of attention falls along the extension of the entity under discussion, and in this sense, the corresponding change of location can be treated as a

metonymic reflection of this attentional change. Attentional change is non-palpable and hardly expressible, and its metonymical fictive representation in terms of locational change is easy to understand and describe, and thus the human-scale understanding is achieved.

Advent paths do not involve any factive movement. Entities described with advent paths share the commonality of having a novel and unexpected configuration or arrangement, and they come into the visual field of the observer as a surprise. The surprising change of an entity from not being in the visual field to coming into it is represented as the new arrival of the entity to its current location, which entails that this entity was not there at the first place when it was not perceived by the observer. This logic has some roots in naïve thinking. Experiments show that only after a certain stage can infants understand that objects out of the visual field still exist (Piaget, 1968, pp. 3-96). When the unexpected perception of an entity is conceptualized and expressed as the entity's change of location from an unknown location to the current one, it is more understandable for the entity with unexpected configuration or arrangement to surprise people.

Both frame-relative motion and pattern paths are associated with some factive motion or factive change of an entity, which is related to the entity under fictive dynamic description. This factive movement or change is represented as the fictive motion on the part of other related entities. Since frame-relative motion events are the most embodied one, it is easy to explain why the factive movement on the part of the observer is described with the fictive movement on the part of the static surrounding entities. As discussed by Talmy (2000a, p. 133), the basic state for human beings is stationariness. This is evidenced by that we tend to conceive ourselves as static and the surrounding entities as moving when we are actually moving with respect to stationary surrounding entities, but we do not treat ourselves as in motion and the surrounding entities as stationary when the surrounding entities are actually moving (Talmy, 2000a, p. 132). It is consistent with the long-standing naïve theory that the sun orbits the earth. We are egocentric when experiencing pure perception (Piaget & Inhelder, 1956, p. 193). It is difficult for children before a certain stage to organize different perspectives, because to discover and move beyond our own point of view requires other mental operations (Piaget & Inhelder, 1956, pp. 171-193). By employing frame-relative motion expressions, we are just describing what we see egocentrically. In pattern paths, the factive motion or change is represented in terms of the fictive motion of a pattern associated with the entity experiencing that factive motion or change. The pattern itself is a fictive entity imposed by human beings. Elements composing a pattern are grouped together as one Gestalt

entity due to different factors, such as perceptual features of the elements (e.g., the waterfall), expert definitions (e.g., the snowline), and cultural conventions (e.g., the city). According to Gestalt theory, the brain structures the representation of a stimulus into better patterns and simplest organizations (Pomerantz & Kubovy, 1986, pp. 36-8). Instead of the entity that is factively under motion or change, the Gestalt entity is conceptualized as moving because it is a better candidate for human-scale understanding than the entity undergoing factive movement or change.

For emanation paths, what is conceptualized as fictively moving is a fictive entity, such as light, shadow, and perception. As discussed above, these fictive entities are conceptualized as palpable material objects through the "substance schema" (Reiner et al., 2000, p. 3). These fictive entities are not palpable but perceivable. We can see where the shadow or light is currently located, and sensory organs on our face can sense visual images, sound, and smell. The locations of the shadow and light and the sensory organs that perceive images, sound and smell are the Goal locations of these fictive entities. We also know that there is a source that causes the generation of these fictive entities, such as the sun for light, shadow-bearing object for shadows, and perfume for smell. With a source and a goal, it is reasonable for us to apply the SOURCE-PATH-GOAL schema and infer the dynamic path from the source to the goal. This inference is especially possible because of the non-permanence of the fictive entities at its current Goal locations. The bright area in a room and the shadow on the ground are not an inherent part of the room and ground respectively; similarly, various senses are the result of stimulation on our sensory receptors rather than merely a feature of the receptors. Together with our rich human-scale experiences of events involving an Agent and a cause, the thought that they must have come from somewhere leads us to infer the path from the source (also the cause) to its current location.

To sum up the above discussion, structuring non-palpable entities and large-scale entities as objects in physical motion helps to reduce non-human-scale entities to human-scale ones. Related to the motion domain, more specific domains are identified, and they are the animal domain, the liquid domain, and the force domain. These three domains are the ones most directly related to human-scale motion.

The animal domain is probably the most fundamental and prominent one associated with the motion domain. Animals are the prototype among all moving entities. They are also the earliest moving entities before artificial tools were invented. In some cases, the movement of

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artificial tools, such as cars or planes, is conceptualized and described in terms of motion verbs for animals, such as *run* and *fly*. Children at a very early stage tend to think that all the moving entities are conscious and assimilate life to movement (Piaget, 2007, pp. 171-187). Conceptualizing nonhuman entities in terms of human beings is probably the most obvious ontological metaphor because doing so allows us to understand relatively abstract and distant entities with motivations, characteristics, and activities on a human-scale (Lakoff & Johnson, 1980, p. 33). As members in the animal domain, human beings know the physical behaviours of this domain best. Most of us are moving ourselves every day in various manners, and we observe movement of animals from time to time. Given all these facts, it is within our expectation that the animal domain is one of the best candidates to serve as the source domain and dynamically structure other less familiar domains.

Liquid is highly salient among inanimate moving entities, and it is perceived as static only in special cases. Liquid in nature, such as rivers, seas, and rain, is constantly in motion. Rivers played a critical role in human being's history. The earliest civilizations worldwide were all originated from areas with rivers. Rivers provided an important way of travelling in ancient times. It is found that liquid as a source domain is used to structure other more abstract domains, including the emotion domain (Kövecses, 1990, p. 53), the finance domain (O'Connor, 1998), the time domain (Yu, 1998, p. 130), etc. Since rivers are indispensable to human beings and being dynamic is one of the intrinsic features of liquid, it is understandable that the liquid domain stands out to dynamically structure other non-palpable and large-scale entities.

In contrast to the animal domain and the liquid domain, the force domain is more like providing a concomitant feature to the motion domain than serving as a source domain through ontological metaphors. Animals and liquid are concrete objects in the physical world whereas force is relatively non-palpable and thus more abstract. Force domain is frequently involved in fictive motion because it is naively believed that force is an indispensable concomitant element to the occurrence of motion and that motion implies force (Hestenes, Wells, & Swackhamer, 1992, p. 4). The idea that "motion implies force" was termed "naïve impetus theory" by McCloskey, which asserts that "the act of setting an object in motion imparts to the object an internal force or 'impetus' that serves to maintain the motion"[35]

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[35] This is one part of the naive impetus theory, the other part is "a moving object's impetus gradually dissipates (either spontaneously or as a result of external influences), and as a consequence the object gradually slows down and comes to a stop" (McCloskey, 1983b, p. 306).

(McCloskey, 1983b, p. 306). Students who are not trained in physics maintain that force is the cause of motion (McCloskey, 1983b, p. 305). This naïve belief is so difficult to remove that even students who are undertaking or have completed relevant physics courses still cannot overcome this misconception completely (Clement, 1982, p. 67; Hestenes et al., 1992, p. 14; McCloskey, 1983b, p. 305). What is more, experts in physics, when facing unfamiliar situations and required to make online responses, will still apply impetus theories (Kozhevnikov & Hegarty, 2001, p. 450). Similar ideas were observed among pre-Newtonian intellectuals (Halloun & Hestenes, 1985, p. 1056; McCloskey, 1983a, pp. 122-123). The commonality between the naïve impetus reasoning on the part of modern students, physics experts, and pre-Newtonian scholars suggests that the impetus view of motion is not merely a mistake; rather, it is grounded in the direct perception and experience of all human beings (Clement, 1982, p. 69; Kozhevnikov & Hegarty, 2001, p. 451; McCloskey, 1983a, p. 127; 1983b, p. 318). The naïve impetus theory probably can explain why force verbs are frequently employed when we conceptualize static spatial entities as undergoing motion. It is in our naïve belief that motion is coupled with force. In children's naïve conception of light and shadow as moving, light is seen as interacting with shadow in a force-like manner (Feher & Rice, 1988, p. 637). Sound is also naively conceptualized as having impetus by students (Linder & Erickson, 1989, p. 497).

Due to the lack of direct experience with non-palpable entities and large-scale entities, we need to borrow structures in more familiar domains to conceptualize them. Perceptually, non-palpable entities and large-scale entities normally play the role of a setting-like Ground; linguistically, they are usually encoded as a where-noun expressing location. When there is the need and intention to put them onto the foreground, such as expressing them as the Figure in a linguistic Figure-Ground organization, special strategies are required. Fictive motion is such a linguistic strategy to focus attention on setting-like entities by conceptualizing them fictively as movable and concrete objects, the result of which is reducing non-palpable entities to congenial human-scale ones.

CHAPTER 8 CONCLUSION

This chapter first summarizes the findings based on the research questions and then points out the significance of the study, following which the limitations are discussed and further studies are indicated.

8.1 Summary

This thesis examines fictive motion expressions in Modern Standard Chinese using authentic data collected from published books and magazines on geography and travel. Data are categorized following Talmy's classification based on English (Talmy, 2000a, p. 103). The six established types of fictive motion are analysed under the frameworks of motion event theory (Talmy, 2000b, pp. 213-288) and Conceptual Metaphor Theory (Lakoff & Johnson, 1980). I will summarize the results by answering the three research questions.

1. How can fictive motion expressions in Modern Standard Chinese be categorized based on Talmy's criteria?

    i. Do all the six established types of fictive motion in English have their instantiations in Chinese?

Yes. All types of fictive motion identified by Talmy in English are observed in modern Chinese. Within a fixed set of texts, some of the types appear more frequently, such as coextension paths and emanation paths; and some of the types occur less frequently, such as access paths. The detailed numbers of examples for each type can be found in Section 3.1.3 in Chapter 3.

    ii. Can all the Chinese fictive motion data be accommodated by the current established types?

No. According to the two sets of distinguishing standards, some of the data are fictive motion sentences but do not belong to any of the established fictive motion types. They are the new types of fictive motion as illustrated in Chapter 6, and they include implied advent paths, leading fictive motion, threading fictive motion, fictive manner motion, and macro frame-relative motion. Type II radiation paths (as discussed in Section 4.2 in Chapter 4) and observer-neutral frame-relative motion (as discussed in Section 5.2 in Chapter 5) are identified as extra subtypes of radiation paths and frame-relative motion respectively since

they are seldom being discussed elsewhere. It is believed that English is also likely to have other types of fictive motion in addition to the six established types.

Taking all the established and new types of fictive motion into consideration, a new categorization (still based on Talmy's categorization framework) is proposed. Implied advent paths are grouped into advent paths as a subtype; leading fictive motion is established as a new type; threading fictive motion is incorporated into coextension paths as a special group; fictive manner motion is proposed to be an encompassing type of fictive motion with pattern paths as one subtype; and macro frame-relative motion is considered as one subtype of frame-relative motion (See Section 6.3 in Chapter 6).

2. What types of participants are typically associated with fictive motion expressions?

Participants in fictive motion expressions include the Figure, the Ground, the Agent, and the Reason. Different types of fictive motion involve different types of participants. For example, the Agent is present mostly in emanation paths, and the Reason only appears in pattern paths. The Figure and the Ground are the constantly encoded participants. The Figural entity is the factively static entity that is linguistically conceptualized as dynamic, and thus it is of particular interest. The Figure in fictive motion can be entities of various types, but many of them are setting-like entities, such as non-palpable fictive entities (e.g., light, sound, or smell), a series of factive entities that are construed as a Gestalt entity (e.g., a row of trees, shops on one street, or a market), and large-scale entities (e.g., geographical phenomena such as mountains and continents, and architectural structures such as buildings and temples). The setting-like feature of the linguistic Figure in fictive motion sentences contrasts to the prototypical perceptual Figure, which is smaller in size, movable, and bounded in shape. The Figure in fictive motion expressions is more like a prototypical perceptual Ground, which is larger in size, fixed, and unbounded in shape. Some extreme cases even show Figure-Ground reversal for fictive motion sentences, in which the perceptually canonical Ground is expressed as a linguistic Figure and the perceptually canonical Figure as a linguistic Ground. It is hypothesized that the employment of fictive motion expressions is a special and effective strategy to spatially characterize setting-like entities.

3. What kinds of semantic information are encoded in the verb in fictive motion expressions?

Semantic elements contained in the verb in fictive motion expressions include the path information (as in verbs such as 升 [shēng; rise], 南下 [nán-xià, southwards-descend], and 经

过 [*jīng-guò*; pass]), the manner information (as in verbs such as 走 [*zǒu*; walk], 流淌 [*liú-tǎng*; flow], and 刺 [*cì*; stab]), and the general motion information (as in verbs such as 延伸 [*yán-shēn*; extend], 移 [*yí*; move], and 迁 [*qiān*; move]). Some types of fictive motion, such as coextension paths and access paths, express manner information less frequently in the verb; and some types, for instance, emanation paths, encode manner information more frequently in the verb. Three more specific types of manner information are identified across many types of fictive motion, namely, manner associated with animals, liquid, and force. Section 7.2.1 in Chapter 7 compares the proportion of verbs encoding different types of semantic information.

4. What specific metaphoric mappings are involved in fictive motion expressions?

Specific metaphoric mappings can be found in Section 7.3 in Chapter 7. The motion domain is the general source domain that is used to structure and express entities described in fictive motion expressions. Some types of fictive motion involve unique metaphoric mappings (such as THE EYE IS A CONTAINER for visual paths), and for some types it is inappropriate to apply metaphoric mappings (such as advent paths, frame-relative motion, and pattern paths). However, there are three specific domains that are frequently observed to structure entities described with fictive motion expressions, and they are the animal domain, the liquid domain, and the force domain.

8.2 Significance

This study broadens the types of fictive motion. Most of previous studies focus only on one or two certain types of fictive motion following Talmy's categorization (Matsumoto, 1996a; Takahashi, 2000; Yang, 2013), and few studies look beyond his categorization. Since this study is based on usage data, it provides a more diversified analysis of fictive motion types and presents a more elaborated classification of fictive motion in authentic language use.

Most previous studies on fictive motion are based on other languages with English being the one most represented (Langacker, 1986; Rojo & Valenzuela, 2003; Talmy, 2000a). By providing an overview of fictive motion in Modern Standard Chinese, this study contributes to the study of fictive motion in general.

This study is the first one (to my knowledge) to fully investigate the participants involved in fictive motion expressions. Previous studies mainly focus on features associated with verbs, such as the encoding of path and manner information (Cifuentes-Férez, 2014; Fan, 2011;

Matsumoto, 1996c). Data show that the entities described with fictive motion sentences are special in terms of Figure-Ground organization. The setting-like characteristics of the Figure seem to be a catalyst for the employment of fictive motion expressions.

Verbs in Chinese fictive motion expressions present great heterogeneity among different types of fictive motion expressions. This implies that the exploration of aspects associated with verbs, such as the encoding of path and manner information, must take the type of fictive motion into consideration.

It is found that the lexicalization patterns of fictive motion expressions seem to be related to those of verb-framed languages. In identifying the linguistic unit "verb", it is observed that some verbal predicate patterns in fictive motion expressions in modern Chinese appear to be associated with ancient Chinese. As discussed in Section 7.2.2 in Chapter 7, verbal predicate patterns with ancient origin include disyllabic words, monosyllabic verbs, *adverb+monosyllabic verb* constructions, *nouns of locality+monosyllabic verb* constructions, Chinese idioms, and *AA 儿B* constructions. For some types of fictive motion (such as prospect paths, access paths, and coextension paths), such patterns can take up a relatively high percentage. An examination of the relationship between the encoding of manner information and the employment of ancient verbal predicate patterns indicates that there is a rough tendency that the more ancient verbal predicate patterns are employed, the less manner information gets encoded. Based on these observations, it is speculated that, compared with modern Chinese, fictive motion expressions may occur more in ancient Chinese, or even the type of language ancient Chinese belongs to, namely, verb-framed languages.

This study identifies specific metaphoric mappings involved in fictive motion expressions. It also tries to solve the seeming conflict between fictive motion and Conceptual Metaphor Theory, namely, why entities in the perception domain and spatial domain, which are supposed to be part of our sensorimotor experiences and thus are fundamental to us, need to be conceptualized and described as entities in the motion domain. The answer is that we seldom have direct, physical, and palpable interactions with those entities, and that we do have a naïve understanding of them based on our daily experiences. This naïve understanding helps us to comprehend them in a human-scale manner and contributes to the use of fictive motion expressions (See Section 7.3.1 in Chapter 7). Following this explanation, this thesis continues to explore why the general motion domain, animal domain, liquid domain, and force domain are employed in fictive motion expressions. The argument is that these domains

help to reduce entities described with fictive motion expressions from a non-palpable scale to the human-scale (See Section 7.3.2 in Chapter 7).

8.3 Limitations

The data source may bias the findings of this study. The data of this study come from written texts on geographical descriptions and travelling notes, which are assumed to be rich in fictive motion expressions. Fictive motion in other genres is left unexplored. However, it is believed that this bias would not be much since even in other genres, fictive motion still tends to be employed to describe static settings and environments.

Subjective judgement, which may affect the results, is inevitably involved. Subjectivity is contained in processes such as the selection of fictive motion sentences from the written texts; the classification of fictive motion expressions; the identification of the domains the Figures fall into; the judgement of the semantic elements in the verbs; and the judgement of metaphoric mappings. It is hoped that the influence of subjectivity has been minimized through the employment of definitions and standards and also the consistency in judgement.

This study identifies new types of fictive motion, but does not propose a new classification system encompassing all the fictive motion expressions observed. Since the classification of Chinese fictive motion is only one of the goals of this study, effort and space cannot be spent solely on the classification. The perfection of the classification system can be made in future studies.

8.4 Further studies

More fictive motion data, such as fictive motion in more genres and in spoken language, can be collected to present a more comprehensive picture of fictive motion. It is also interesting to see whether there is any difference among fictive motion in different genres or between written texts and spoken language. More data are also helpful in proposing a more inclusive classification system.

Whether fictive motion expressions are richer in ancient Chinese needs further investigation. It is observed that some verbal predicate patterns in fictive motion expressions are typical of the patterns in ancient Chinese. It is possible that ancient Chinese is more suited to employ fictive motion sentences since it has the relevant patterns.

Whether fictive motion occurs more in verb-framed languages than in satellite-framed languages requires further exploration. The employment of verbal predicate patterns in ancient Chinese is probably due to the fact that ancient Chinese is a verb-framed language. The lexicalization patterns of fictive motion are probably more compatible with the lexicalization patterns of verb-framed languages.

The role played by naïve physics in conceptual metaphors is worth exploring further. Naïve physics provides a reasonable explanation of why some sensorimotor experiences are conceptualized metaphorically and why the force domain is adopted in structuring other domains. The combining of naïve physics and conceptual metaphor is promising in that both of them emphasize embodied experiences in the structuring of conceptualization. Many of the naïve models are consistent with the ideas held by ancient intellectuals, which can be taken as the evidence that some concepts understood through naive models are difficult to comprehend in some way for mankind (Andersson & Kärrqvist, 1983, p. 387; Clement, 1982, p. 69; McCloskey, 1983a, p. 127). This is also consistent with conceptual metaphors in that we tend to understand more difficult concepts metaphorically.

Fictive motion expressions may contribute to the study of Geographical Information Systems (GIS). It is pointed out that the exploration of GIS in terms of common sense geography needs to take linguistic evidence into consideration (Egenhofer & Mark, 1995, p. 6; Mark, 1997, p. 314). Geographical entities are frequently described in fictive motion expressions, which reflects people's common sense and naïve conceptualization towards them. Dynamic descriptions of static geographical entities provide a new avenue for geologists to study GIS.

Appendix   Data Source

《地球》，《彩图科技百科全书》编辑部（Ed.），2005，上海：上海科学技术出版
　　社。

Earth，<Technology Encyclopaedia with Colourful Pictures> (Ed.), 2005, Shanghai:
　　Shanghai Scientific and Technical Publishers.

《山居笔记》，余秋雨，1995，台北：尔雅出版社。
Notes about Living in a Mountain, Qiuyu Yu, 1995, Taipei: Er-ya Press.

《文化苦旅》，余秋雨，2001，上海：东方出版中心。
A Cultural Journey, Qiuyu Yu, 2001, Shanghai: Oriental Publishing Centre.

《行者无疆》，余秋雨，2001，北京：华艺出版社。
No Boundary for Travellers, Qiuyu Yu, 2001, Beijing: Huayi Publishing House.

《千年一叹》，余秋雨，2002，北京：作家出版社。
Sigh in a Thousand Years, Qiuyu Yu, 2002, Beijing: Writers Publishing House.

《出走十五年》，余秋雨，2004，海口：南海出版公司。
Run away for Fifteen Years, Qiuyu Yu, 2004, Haikou: Nanhai Publishing Company.

《余秋雨散文：插图珍藏版》，余秋雨，2005，北京：人民文学出版社。
Yu Qiuyu's Prose: The Illustrated Collector's Edition, Qiuyu Yu, 2005, Beijing: Peoples
　　Literature Publishing House

《东西南北人：中国人的性格与文化》，博文（Ed.），2001，北京：当代世界出版
　　社。

People from East, West, South and North: Chinese Personality and Culture, Wen Bo (Ed.),
　　2001, Beijing: The Contemporary World Press.

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Excellent Chinese Travel Essays in the 20th Century, Fei Lin (Ed.), 2004, Beijing: People's
　　Literature Publishing House.

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Modern and Contemporary Travel Essays by Famous Scholars with Photos:

《我与地坛》，史铁生，2002，济南：山东画报出版社。
The Temple of Earth and Me, Tiesheng Shi, 2002, Jinan: Shandong Pictorial Publisher House.

《昆明的雨》，汪曾祺，2004，济南：山东画报出版社。
Rain in Kunming, Cengqi Wang, 2004, Jinan: Shandong Pictorial Publisher House.

《呼兰河传》，萧红，2003，济南：山东画报出版社。
Story of the Hulan River, Hong Xiao, 2003, Jinan: Shandong Pictorial Publisher House.

《桨声灯影里的秦淮河》，朱自清，2002，济南：山东画报出版社。
Qinhuai River with the Sound of Oars and the Shadow of Lights, Ziqing Zhu, 2002, Jinan:
　　Shandong Pictorial Publisher House.

《欧游杂记》，朱自清，2002，济南：山东画报出版社。
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　　House.

《我所知道的康桥》，徐志摩，2002，济南：山东画报出版社。
Cambridge in my Eyes, Zhimo Xu, 2002, Jinan: Shandong Pictorial Publisher House.

《钓台的春昼》，郁达夫，2002，济南：山东画报出版社。
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《西湖的雪景》，钟敬文，2004，济南：山东画报出版社。
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China National Travel, monthly, editor: Tianbei Liu, Beijing: <China National Travel> Editorial Department, Jan. 2012-Dec. 2012, 12 issues.

《世界》，月刊，主编：王建梅，北京：《世界》杂志社，2012年1月-2012年12月，12期。
Top Travel, monthly, editor: Jianmei Wang, Beijing: <Top Travel> Editorial Department, Jan. 2012-Dec. 2012, 12 issues.

Textbooks
《物理》，三册，北京：人民教育出版社。
Physics, three volumes, Beijing: People's Education Press.

《地理》，两册，北京：人民教育出版社。
Geography, two volumes, Beijing: People's Education Press.

《化学》，两册，北京：人民教育出版社。
Chemistry, two volumes, Beijing: People's Education Press.

《生物》，四册，北京：人民教育出版社。
Biology, four volumes, Beijing: People's Education Press.

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