A LEXICAL SEMANTIC MODEL OF VERB-DIRECTIONAL CONSTRUCTION IN CHINESE – A CASE STUDY OF V-*SHANG*

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2006

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A THESIS SUBMITTED

FOR THE DEGREE OF MASTER OF LINGUISTICS

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ACKNOWLEDGEMENTS

SUMMARY

Directionals like *shang* "up", are always used with preceding verbs, which constitute "Directional Resultative Construction", or "Directional Verb Complement" in Chinese. The traditional discussion of V-directional assumes that V-directional is characterized with resultative meaning and perfective aspect. However, this observation is overgeneralized and ignores some nuances of the internal relations between V and directionals.

This thesis adopts a somewhat different approach. Taking as a starting point the distribution of *shang* in different V-*shang*s, its semantic extension route from prototypical meaning to peripheral meanings is worked out, through which we get some ideas about the variety of senses *shang* embodies and the decisive and principal semantic elements for the semantic change. It will be mainly dealt with in the domain of cognitive linguistics.

The semantic network lays the foundation for the subsequent discussion of event structure and aspect system. Based on the meaning extension route of *shang* in V-*shang*, different types of event structure and aspect meaning are correspondingly represented, which finally substantiates the hypothesis that there exist projections from the level of lexical semantics to that of syntax. Event structure and aspectual realization are two important windows to see the interface of semantics and syntax in this research.

Thus not only is the analysis of V-*shang* construction presented in this thesis able to account for the semantic features of *shang* and syntactic behavior of V-*shang*, more importantly, it also provides a comprehensive and integrative perspective of looking at V-directional construction.

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Abbreviations

ASP: aspectual marker

CL.: classifier

CONC STR: conceptual structure

DVC: directional verb complement

Ea: event of activity

Eacc: event of accomplishment

Each: event of achievement

Es: event of state

F: final point

I: initial point

RVC: resultative verb complement

SEM STR: grammatical semantic structure

VP: viewpoint

CHAPTER 1 INTRODUCTION

1.1 The phenomenon of V-*shang*

Spatial expressions like *shang* 'up/on' and *xia* 'down/under', has both directional and locative meanings. Generally speaking, their locative meaning appears with the use as prepositions; while their directional meaning comes out saliently with the use as verbs, for examples:

1. a. wo *shang* lou

       I   up   floor

       I go upstairs.

  b. wo xia   lou

       I   down floor

       I go downstairs.

Since its verbal use has strong directional meanings, they are usually called "directionals" in the above cases. These directionals can also be used together with verbs in the form V-*shang* (or V-*xia*). These constructions are called "Directional Verb Compounds" (Chao 1968), or "Directional Resultative Compounds" (Li and Thompson 1981). In this thesis, the attention will only be paid to V-*shang* as a case study of V-directional. The examples below are cited from Chao (1968:459-461):

2. a. <u>pa *shang* </u> shan

       climb up   mountain

      climb up the mountain

b. <u>Dai *shang*</u> maozi

    wear on   hat

    put on one's hat

c. <u>Ai *shang*</u>   ta

    Love up   him/her

    Fall in love with him/her

Most Chinese linguists take the same stand (Chao 1968, Li and Thompson 1981, Thompson 1973, Lu 1980) that in the above three examples directional *shang* is a complement or suffix to the preceding verb and it acts as secondary verb in the compound, which shows the result of the preceding action. In another sense, they all unanimously agree that directional in V-directional like V-*shang* has resultative meaning and V-directional is a subtype of Resultative Verb Construction (RVC), where the activity lexicalized by V results in the state lexicalized by *shang*. For instance, in 2.b, verb *dai* 'put on' initiates the action that results in the change of location of *maozi* 'hat', and finally the hat is located somewhere— *shang* 'on'.

However, I argue against the view that the above three examples of V-*shang* all belong to the category of RVC, because based on the observation in this thesis, *shang* in 2.a and 2.c does not show resultative meaning at all and it does not always function as secondary verb across examples. On the contrary, I argue that *shang* in V-*shang* embodies three types of meaning, not only with lexical meaning but also grammatical meaning; and correspondingly two other types of V-*shang* are recognized in addition to RVC. The semantic features of the three types of *shang* are represented as follows.

Type1. *shang* retains full lexical meaning of [+movement], [+path] and [+locatedness]; and it is used as a typical motion verb;

Type2. *shang* retains the semantic feature of [+locatedness] and [+path]; it does not act as a full predicate but as a complement to show the caused result of V;

Type3. *shang* undergoes grammaticalizaiton. The lexical meaning of *shang* is bleached and *shang* acts as a grammatical marker to V;

Due to the semantic change of *shang* across examples, the semantic and syntactic relations between V and *shang* also vary correspondingly. In this research three types of V-*shang* with distinctive semantic and syntactic features are defined in terms of event schema.

Type1. V (co-event of manner) + *shang* (core-event of motion)

Type2. V (core-event of causer) + *shang* (co-event of caused)

Type3. V (core event) + *shang* (grammatical meaning)

This cursory examination of V-*shang* reveals some of the hallmarks of V-directionals, which were ignored or overlooked in previous research. In this thesis, I propose that these three types of *shang* in V-*shang* derive from the prototypical motion verb *shang* and that three different types of relation between V and *shang* are embodied in V-*shang* construction, which will be represented at the level of semantics and syntax. In specific terms, three types of V-*shang* will be discussed from the perspective of semantic networks, event structures and aspect meanings respectively.

1.2 Hypotheses

The initial hypotheses of this work are summarized as follows.

(i) Different meanings of a single linguistic unit in different examples should be explainable by virtue of a single coherent semantic model. In other words, different senses of a lexeme should be associated with each other which are linked by some rules and moreover they should be organized into a coherent and principled semantic network with prototypical and peripheral meanings.

(ii) There is a set of semantic elements that are responsible for the syntactic structure of a sentence and the syntactic behavior of its predicator. "The grammar includes a level of representation (Grammatical Semantic Structure) that specifies all and only the semantic information relevant for syntax, phonology and morphology". (Mohanan and Mohanan 1999) In another word, there are certain mapping relations between the level of lexical semantics and syntax.

(iii) Vendler (1967) classifies predicates into four types of event—States, Activities, Accomplishments and Achievements. Further research (Smith 1991, Krifka 1998, Rothstein 2004) expands Vendler's theory and argues that telicity and atelicity are properties of verb phrases, and the status of verb phrase with respect of telicity will depend on the interaction of the meaning of the V and with other elements in the verb phrase (Rothstein 2004:4). Here, I follow Rothstein's above claim and propose that in Chinese directionals in V-directional contribute to the telicity of event lexicalized by verb predicates. In particular, if *shang* retains lexical meaning, then the event type of V-*shang* is Achievement; if *shang* retains its stative use and acts as the resultative complement, then the event type of V-*shang* is Accomplishment; if *shang* is grammaticalized, then the event type of V-*shang* is State. This hypothesis will be tested in Chapter 3 in a detailed way.

1.3 The corpus profile of the three types of V-*shang*

Previous studies of the classification of V-directional (Chao 1968, Li and Thompson 1981, Lü 1980) have been conducted without recourse to attested language data or to strict syntactic constraints, but with reliance on intuitions. Some may argue that it is quite reasonable and reliable for researchers to make linguistic judgments based on their own intuition if they are native speakers of the language(s)[1]. We admit that native speaker's intuition is quite important for linguistic research, but intuition alone may not reveal all the possible usages of a word and may not present the whole picture of a language phenomenon. When the researcher may invent an example to support or disprove an argument, he is consciously monitoring his language production, which may not represent the actual and natural language use. For example, over-generalization and under-generalization are two of the co-occurring problems of the intuition-based study. Chao (1968) jumps to the conclusion that *shang* has the stable lexical meaning of "on/up" without figuring out some subtleness of V-*shang*. Liu (1995) presents us too many subclasses of V-*shang*, which means that the analysis is not conducted in a concise or delineated way.

In contrast, these disadvantages are circumvented by the corpus-based approach with strict syntactic and semantic constraints. Firstly, a large number of unbiased data are retrieved, which include as many different uses of *shang* as possible. Secondly, the syntactic and semantic criteria we proposed will be applied to analyze the data and classify V-*shang* in a much stricter and more principled way.

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[1] This argument is made by one of the anonymous reviewers of this thesis. Maybe she just wants to remind me to state my argument of using corpus data in a more convincing and explicit way. I would like to thank her kind reminder.

The hypotheses I made in section 1.2 will be tested on a corpus of 635 examples of V-*shang*. The sample is obtained from *Corpus of People's Daily in Jan, 1998* at the website of Xiamen University Online Corpus. This Corpus contains 1.83 million characters tagged with part-of-speech, where *shang* as independent verb and *shang* in V-*shang* construction are both tagged with 'v', which represents either transitive verb or intransitive verb. Under the tag of '*shang*/v', 884 examples are retrieved, but only 635 examples qualify to be in the category of V-*shang*. According to the semantic and syntactic criteria we proposed in 1.1, three types of V-*shang* are recognized and their tokens and proportions among these 635 examples are shown below:

Types of V-*shang*	Token	Percentage
Type 1	178	28%
Type 2	204	32%
Type 3	253	40%
Total	635	100%

Some examples from the corpus data are provided as follows.

Type 1. *Shang*: full lexical meaning

3. a. Bai   ming zhong xiao xuesheng zou *shang* jie tou

   Hundred CL.   middle small student walk up   street head

   Hundreds of students from primary and second schools walk onto the street.

   b. Deng *shang* guo hang

    Board up   national airline

    Board on the fight of Air China

Type 2. *Shang*: static lexical meaning

4. a. yin *shang shang*biao he wenzi

   print up   brand   and characters

   print the brand and characters on it

   b. cun zhang ceng *shang* houli

   village head send up   heavy present

   the head of the village sent up a big present

Type 3. *Shang*: grammatical meaning

5. a. chi *shang* didao   de   xibu fengwei

    eat up   authentic DE west taste

    have a taste of the authentic food from the west part of China

   b. kan *shang* qingxi de dianshi jiemu

   watch up clear   DE TV   programme

   be able to watch the TV programmes clearly

   We have now established what we will be studying and described the data and
hypotheses we will adopt in our research. In terms of goals, our most important goal is to
redefine and reexamine the semantic and syntactic features of V-directional construction.
Yet we wish to make a comprehensive description of V-directional and go beyond the
traditional account of V-directional as a subtype of RVC.

1.4 Organization of the work

The thesis will work out a lexical semantic model to explain the V-*shang* construction
systematically. The term "lexical semantics" here refers to the assumption that the lexical

properties of the predicate are responsible for the syntactic behaviors of a sentence. In particular, we will find out the essential and decisive semantic features of the predicate, and then investigate how these semantic features are mapped onto the level of syntax and morphology.

The lexical semantic model is worked out according to the following procedures.

In Chapter 2, the previous researches on the semantic classification of *shang* in V-*shang* will be reviewed. The distinctive but related senses of *shang* in V-*shang* will be organized in a principled way. The semantic network will tell us the semantic features that might be mapped onto the level of syntax.

Chapter 3 offers an investigation of the argument realization of V-*shang* in terms of event structure. It is constrained by the semantic features of V and *shang*. Three different types of event structure are worked out to demonstrate the changing semantic features and syntactic status of *shang* in V-*shang*.

In Chapter 4, a three-level aspect system is proposed to examine the temporal features of eventualities encoded by V-*shang*. In particular, situation aspect, viewpoint aspect and meta-aspect are regarded as three different perspectives to see the temporal features of V-*shang*. This is another aspect of the interface of semantics and syntax.

Finally, a general conclusion is offered in Chapter 5, where a unified and coherent model of the interface of lexical semantics and syntax is proposed on the basis of three lines of analysis in Chapter 2, 3 and 4.

CHAPTER 2 THE SEMANTIC NETWORK OF SHANG IN V-SHANG

2.1 Introduction

Shang in V-*shang* exhibits a number of meanings across examples, which have been accounted for from different perspectives by many Chinese linguists, like Chao (1968), Lü (1980), Liu (1998), Li and Thompson (1981), Shi & Li (2001), Xiao and McEnery (2004) etc. Chao (1968:459-460) argues that in V-directional construction, directional complements like *shang* have "idiomatic meanings and are therefore lexical in nature", and *shang* as complement usually means "up"/ "on". It is obvious that Chao (1968) takes the monosemy stance that forms are paired with a certain type of highly abstract meaning and this abstract meaning can be instantiated by contextual knowledge.

6. a. dai *shang* maozi

   put   on   hat

   put on one's hat

   b. ai   *shang* le   ta   le

   love up   ASP   him/her ASP

   fall in love with him/her

   c. chi *shang*   ying   le

   eat up   addiction ASP

   get addicted to

   d. guan *shang* men

   close up   door

   shut up the door

According to Chao's claim, *shang* has some stable lexical meanings, like "on" or "up", and they are heavily constrained by the preceding verbs, which contribute to idiomatic meanings. But we did not see any explanation from Chao (1968) about on what conditions we use "on" or "up" to gloss *shang*. We admit that the nature of meaning construction is a dynamic and creative process, but not all meanings can be the result of situated (contextual) interpretation. In 6.a, when *shang* follows verb like *dai* "wear/put on", the static spatial meaning of 'on' can be easily deduced. But in 6.b and 6.c, the meaning of "up"/ "on" is not that easy to be deduced, because in these two examples *shang* is metaphoricalized rather than retaining pure spatial meaning. In another word, that complement *shang* has the highly abstracted lexical meaning like 'on'/ 'up', is not clearly defined by Chao (1968). And this approach does not explicitly explain the exact way of deducing meaning from contexts.

Lü (1980) makes a detailed description of different senses of *shang* in V-*shang* construction, but his descriptive work is more like compiling dictionary entries and he does not work out any underlying rules that correlate these meanings. Lü (1980: 418-419) summarizes six different meanings of *shang* in V-*shang*.

(i) verb + *shang* + noun

    a. show the result of the action;

       Chuanghu guang *shang* le

       Window   close   up   ASP

       The window is closed.

b. attach something on something else;

Chitang li yang *shang* le   yu

Pond   in keep up   ASP fish

The pond has been used to keep fish.

c. achieve the goal ;

ta shuo bu *shang* congming, keshi hen yonggong

he say no up   intelligent but   very hardworking

He is not very intelligent but very hardworking.

d. show the continuation of activity, esp. the starting of an activity;

Hui   hai mei kai, dajia jiu taolun   *shang* le

Meeting yet no open they then discuss up ASP

They are into discussion before the meeting is kicked off.

(ii) verb+ *shang* + number

e. increase in number

Zuijin shi mian, mei tian   zhi   neng shui *shang* san   si   ge xiaoshi

recently lose sleep every day   only can sleep up   three four CL. hour

Recently, due to insomnia, and I can only sleep 3 to 4 hours every day.

(iii) verb + *shang* + location

f. move from low to high

Xiongying fei *shang* le   lan   tian

lanneret   fly up   ASP blue sky

The lanneret flies up to the sky.

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Lü's description takes a homonymy position that *shang* in V-*shang* has several distinctive meanings and they are independent from each other. This approach ignores any systematic relationships between the distinctive meanings associated with a single linguistic form and fails to see how meanings of a linguistic unit are extended and organized in a motivated and systematic way. Additionally, Lü believes the complements following V-*shang*, like noun, number and location, are the decisive factor of the classification of V-*shang*. The category of complements does not reveal the changing semantic relations between V and *shang* of each type of V-*shang* at all, which is more directly decided by the lexical semantics of verbal elements. In another word, Lü's classification fails to find the appropriate criteria of the classification that should be based on the semantic relations of verbs.

On the basis of Lü's works, Liu (1998) makes a great stride in the semantic description of *shang* in V-*shang*. He classifies *shang* into three main types: directional, resultative, stative as well as a few exceptions. Though this classification is quite insightful, it is difficult to see any answers to the questions: why can *shang* embody these three types of meaning? What are the connecting ties that correlate different types of meanings? A more serious problem that stands out is that Liu's classification is heavily intuition-based and is not constrained by any syntactic or semantic rules, with which we can use to distinguish different types of V-*shang*. On the contrary, he believes that these three types of meaning have the same syntactic features. Take 7.a and 7.b for example.

7. a. haizi men pa   *shang* le   shan   ding   (Liu 1998:3)

   child PL. climb up   ASP mountain   top

   The children climb up to the top of the mountain.

b. Ta ba   liang gen shengzi jie *shang* le.   (Liu 1998: 15)

He BA two CL. rope tie up   ASP

He has tied up these two ropes together.

According to Liu's explanation, *shang* in 7.a is directional and *shang* in 7.b is resultative, but both of these two uses of *shang* refer to "resultative meaning" and "the relation between V and *shang* is action and result" (Liu 1998: 2). However, our observation shows that these two types of V-*shang* are characterized by manner of motion-motion relation, and causer-caused relation respectively. Our argument regarding this problem will be further elaborated in due course.

One of the common problems shared by these researches is that they all take a narrow view to regard *shang* as complement to the preceding V, or a subtype of RVC in Mandarin. As a matter of fact, resultative meaning is only one type of meaning in the semantic network of *shang* in V-*shang*, and its proportion only takes up 32%, in contrast to 28% of full-lexical meaning and 40% of grammatical meaning of *shang*. Besides, they all assume that distinctive meanings within a semantic network are arbitrarily related rather than correlated or motivated in some systematic and principled way.

In this section, I will consider how distinctive meanings of *shang* in V-*shang* might be accounted for in a systematic manner within a cognitive lexical framework. At base, I argue that the many senses of *shang* constitute a motivated semantic network which is organized around a prototypical meaning on the basis of our life experiences and cognition. In addition, since *shang* is a motion verb which entails an explicit spatial image or schema, different senses of *shang* derive their own schemas from this proto-schema. From these two points, we learn that *shang* in V-*shang* is not an arbitrary

repository of unrelated lexical meanings, but "an elaborated network of form–meaning associations" (Langacker 1987).

2.2 The semantic network of *shang* in V-*shang*

Before we work out how different meanings of *shang* change and how they are organized into a coherent semantic network, it is necessary to introduce some basic terms and notions in the cognitive linguistics. Since *shang* is called a directional verb (a kind of motion verb), it will represent a motion event in most cases. "A motion event consists of one object (Figure) moving or located with respect to another object (Ground)."(Talmy 2000:25). Talmy (2000) also suggest that there are the following four semantic components of motion events: (a) the Figure: an object moving or located with respect to another object (the Ground); (b) the Motion: the presence per se of motion or location in the event; (c) the Path: the course followed or the site occupied by the Figure object with respect to the Ground object; and (d) the Ground. In this thesis, given that not all the semantic elements are related to the meaning change of *shang* and its syntactic features, I analyze the Motion event into three main semantic elements: [+movement], [+path] and [+locatedness]. Here, [+movement] is equivalent to Motion; [+path] and [+locatedness] represents two subclasses of Talmy's notion of Path, that is, the course followed and the site occupied by Figure respectively.

Another important idea in Talmy's theory is macro-event. It is a category of event complex which is prone to conceptual integration and representation by a single sentence. It consists of two parts—core event and co-event. The former is a unitary event by itself. It includes an event of motion or location in space, a contouring in time, an event of

change or constancy among states, an event of correlation among actions, and an event of fulfillment or confirmation in the domain of realization. The latter constitutes an event of circumstance in relation to the macro-event as a whole, and to perform functions of support in relation to core-event. (Talmy 2000: 217-220)

2.2.1 The prototypical meaning of *shang* in V-*shang*

Shang and *xia* are two of the basic orientations in people's cognition of the world, which are constructed on the basis of human body embodiment. According to Chinese etymology, the modern Chinese character *shang* (上) was derived from its original character "二" in oracle inscriptions: the long stroke represents the ground and the short stroke means something above the ground (Zuo 2005).

The oracle inscription of *shang* represents both static and dynamic spatial meanings. When *shang* is used as noun or adjective, it has the locative spatial meaning of "something is above/on something else", as illustrated in 8. When *shang* is used as verb, it has the directional spatial meaning of moving from low to high and the static meaning of duration, as in 9 and 10.

8. zuozhi *shang*

    desk   on

    on the desk

9. *shang* wutai

    up   stage

    go up to the stage

10. zou *shang* wutai

walk　up　stage

walk up to the stage

9 and 10 exemplify two syntactic possibilities of *shang* as verb: in the case of 9, *shang* is used as an independent verb to be predicate; in 10, *shang* is used in V-*shang* construction. 9 and 10 express the same spatial meaning and spatial image: the agent moves from low to high. 10 only differs from 9 in that the verb preceding *shang* acts as manner of motion showing how the motion is realized. It is obvious that in this type of V-*shang*, *shang* retains the lexical meaning as a full motion verb and meanwhile acts as a full predicate, while the preceding verb acts as a modifier to show the manner of motion.

It is worth noting that the path lexicalized by *shang* is not necessarily fully vertical. It can also be at any angle tilting from horizontal to vertical. Take 11 for example. 11.a and 11.b lexicalize the situation that the agent moves from a near point to a farther point along a horizontal path.

11. a. nongmin qunzhong yao　　zou *shang* zhi　fu　de　jinguang dadao

farmer　mass　　need　walk up　become rich DE　bright　road

The farmers were hoping to walk on the bright road of getting rich.

b. renmen ying　　　*shang* qian　　qu

people move　up　　forward go

People moved forward.

The cognitive basis of the vertical-horizontal mapping is people's perceptual experience. When observing something far from us, we get a minisized image of the object that is above the ground; when we move forward, we get a close viewpoint and

meanwhile the image we obtain appears taller and larger, as illustrated in Figure. 1. That is why it is justified to say that "to move forward is to move upward" (Lakoff and Johnson 1980:16).
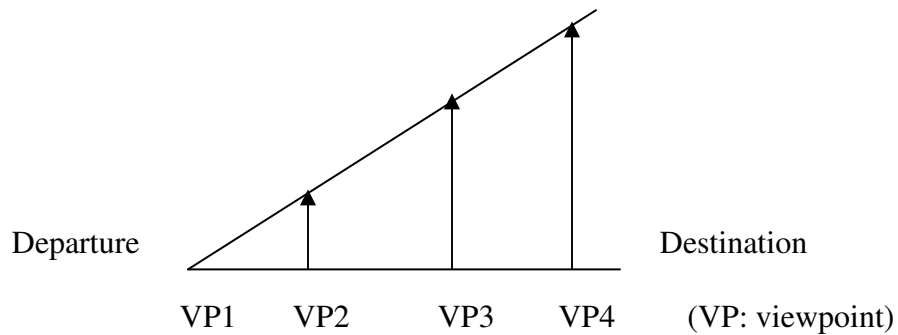
Departure   Destination

VP1   VP2   VP3   VP4   (VP: viewpoint)

Figure. 1 "To move forward is to move upward."

In this use of *shang* in V-*shang*, *shang* is the verb-head which is able to assign thematic roles of Agent, Theme as well as Location. More significantly, the subject is assigned the roles of Agent and Theme at the same time. It suggests that *shang* does not exhibit any extra causative relations, that is, the Agent has direct control over himself/herself rather than over any other objects. Thus *shang* represents a self-propelled motion or internally caused motion. The self-propelled and self-centered meaning of *shang* can be seen as the source point of the meaning extension network and as the anchor of people's knowing of the world. People are apt to conceptualize the world from ego to others, from something near to something far away on the basis of human body embodiment (Lakoff and Johnson, 1999). Besides, "what may serve as source concepts or prototypical meanings are those elementary human experiences, related with the physical state, behavior, or the environment of human beings" (ibid: 1980), so it is justified to regard the dynamic spatial meaning of the agent moving from a low point to a high point along a certain path as the prototypical meaning of *shang* in V-*shang*. It instantiates a typical Motion event that

consists of the Figure moving or located with respect to the reference object or Ground"
(Talmy 2000:25). We analyze the Motion event into three semantic features:
[+movement], [+path] and [+locatedness], which are defined as the prototypical semantic
elements of motion verb *shang*.

2.2.2 The extended meaning of *shang* in V-*shang*

In addition to the literal meaning of *shang* in the spatial domain, *shang* has a number of
other senses in other domains. They are not isolated items but correlated with each other
by links. They generally extend from the prototypical meaning through cognitive
schemes, such as metaphor and metonymy. As claimed by Lakoff and Johnson (1980:5-
6), metaphor is not only a matter of language but also a matter of thinking; metaphors as
linguistic expressions are possible precisely because there are metaphors in a person's
conceptual system. Metonymy is also a way of thinking, for example, it visualizes
people's cognition of part-whole relation onto the surface of language. When people take
metaphorical or metonymical thinking, there exist mappings across domains—from
source domain to target domain and those cognitive activities are finally expressed
through language. Take *shang* for instance, the prototypical or spatial meaning of *shang*
is generally regarded as the source domain, from which other abstract or non-spatial
meanings are derived through the mapping of spatial domain onto target domains. Those
derived and extended senses in the target domain are regarded as the peripheral meanings.
The prototypical meaning and peripheral meanings constitute the semantic network of
shang.

2.2.2.1 *Shang*: static spatial meaning

As defined, the prototypical meaning of motion verb *shang* is composed of three semantic elements: [+movement], [+path] and [+locatedness]. In specific terms, the agent takes an upward motion and finally locates somewhere. However, in the use of peripheral meanings, these semantic elements will be selected and only part of them will be saliently mapped or retained.

Take 12 for example. *Shang* only retains the semantic elements of [+path] and [+locatedness], and that of [+movement] is not mapped. The reason lies in the fact that the V has strong causative meaning—acting as the causer and it disqualifies *shang* to initiate the action.

12. a. Ceng *shang* wenjian

Send up document

Send up the document

b. kao *shang* zhongdian zhong xue

exam up important middle school

get admitted to the key high school

c. Dang   *shang* xianzhang

serve as up   mayor

Serve as mayor

In 12.a, verb *ceng* causes *wenjian* to be sent along the path—an abstract path from low to high along the social class. If we regard the source domain of *shang* as physical and concrete, this target domain is social and ideological. Location argument, like *zhongdian zhongxue* and *xianzhang*, are valued as being at the high position along the social tier and

are expected to be reached by most in our society. The cognitive basis underlying this metaphor is that *shang* refers to something important in our society. The human body embodies a hierarchy of importance from low (foot) to high (head). In the similar line, our society is also structured along this "body hierarchy". From a lower class to a high class is the upward motion, which is ideally lexicalized by *shang*.

In a Motion event, "the Path is the path followed or site occupied by the Figure object with respect to the Ground object" (Talmy 2000: 25). If the path lexicalized by *shang* in 12 is the route followed by the Figure object, then in 13 *shang* represents another type of Path—the site occupied by the Figure. The first type of Path is equivalent to [+path] in my model and the second type of Path is similar to [+locatedness]. To put it in another way, *shang* in 13 only retains the semantic elements of [+locatedness] and [+path], and that of [+movement] is not saliently represented, since the typical route lexicalized by *shang* is shadowed and overtaken by the preceding verb due to their semantic competition.

13. a. rang bentu mote   chuan *shang* bentu shizhuang

    let   local model wear   up   local clothes

    Let the local models wear the local design of clothes.

  b. pi   *shang*   lü   zhuang

    wear up   green clothes

    put on green clothes

  c. tuixiu hou, bei   *shang* pugaijuan

    retire after take up   baggage

    He carries on the baggage after retirement.

In13. a, the changing or causing process is undertaken by verb *chuan* 'wear', while *shang* simply indicates the direction and the final result of the causative activity—*shizhuang* 'clothes' is being transferred onto the body from somewhere. In other words, only the semantic element of [+locatedness] and [+path] are saliently mapped and represented in this type of V-*shang*. It can be concluded that in this case *shang* is no longer a typical motion verb but more like the adverb *shang* with static spatial image and meaning and that *shang* acts as the verb complement, indicating the result or the changed location of the preceding activity. Since only part of the spatial schema of *shang* is mapped, the semantic change in 13 is a metonymical process. That is why Chao (1968) has two English equivalents—"up" and "on" to gloss *shang*. Here, we prove that the locative meaning of "on" is derived from the prototypical meaning of "up".

This type of V-*shang* behaves differently from the prototypical use in 2.2.1. Firstly, in this case of V-*shang*, the lexical meaning expressed by *shang* is not literal but abstract, which is realized through metonymy. In other words, its lexical meanings are not purely spatial but fall into other domains. Secondly, *shang* does not maintain full lexical meanings and some of the semantic elements are bleached or shadowed by the preceding verb, especially [+movement] is not represented at all. That is why *shang* does not act as a full predicate but as complement with stative meaning showing the direction and the final result of activities. Both V and *shang* can assign the thematic roles, but V assign the thematic roles of Agent and Theme, but the stative *shang* only assigns the role of Location. Thirdly, the prototypical use of motion verb *shang* in the source domain represents a kind of self-propelled motion, but here this extended use of *shang* in the target domains features externally caused motion, which implies that some external

forces cause the change-of-location of the objects. In particular, this type of V-*shang* construction is characterized by causer-caused link, where V is the causer and *shang* is the caused. V initiates the activity and *shang* shows the final state or result of this activity.

2.2.2.2 *Shang*: grammatical meaning

In 2.2.2.1, the meaning of *shang* in the second type of V-*shang* is expanded beyond the purely spatial domain through the scheme of metonymy. Meanwhile, the lexical meaning and syntactic status of *shang* also change to some extent. In the third type of V-*shang*, we find that the lexical semantics of *shang* are bleached to the greatest extent, and that it has no independent syntactic status at all in V-*shang* but simply functions as a grammatical marker showing temporal features of the event lexicalized by the preceding verb. Examples are illustrated in 14, 15 and 16.

14. a. cun   li   quanbu gai *shang* le   er   cheng   loufang

      village in   all   build up   ASP two   storey   house

      All the villagers have their own two-storey houses.

   b. Tamen you   chao   *shang* le

      They   again quarrel   up   ASP

      They start to quarrel again.

   c. Ta   lian   *shang* le   taiji

      He   practice up   ASP   taiji

      He takes to practice taiji.

In 14, the lexical (verbal or spatial) meaning embodied by *shang* is not observable anymore, thus *shang* can take on any argument. NP arguments like *loufang* 'house' in

14.a and *taiji* 'taiji' in 14.c are directly taken on by V but not by *shang*, because with the losing of verbal features, *shang* is deprived of the argument-taking ability. It is not acceptable to say that "*all the villagers go up to the houses", "* they go up to quarrel" or "* he goes up to taiji", no matter how imaginative he/she might be. At this point, we may say that the lexical meaning of *shang* is bleached to the greatest extent, and at the same time, its grammatical meaning and status have been well established. What 14 shows is that V lexicalizes an activity and *shang* acts as a grammatical marker to modify the temporal structure of the event lexicalized by V. As for the question how the internal temporal structure is changed by *shang*, it will be discussed in detail in the rest of this thesis.

Without *shang*, 14.b can be interpreted as "they quarreled again", which describes a happened activity with initial point and final point, and which is featured as a closed reading. However, with the combination of *shang*, it expresses the meaning that "they start to quarrel again", and that the quarrelling state is sustained by "*shang*", resulting in an inchoative situation. That is why we can say that in this type of V-*shang*, *shang* is able to change the temporal features of predicate or to change the internal structure of the whole eventuality, for instance, to make a closed simple event become a complex event with an open reading. The inchoative meaning endowed by *shang* also echoes Lakoff's metaphor of "up is to appear", because our life experiences tell us that "up", like "get up", "stand up" implies something comes into our vision and "down", like "lie down", "sit down" implies something goes out of our vision. From another perspective, we assume that the departing stage of the image schema of *shang* is mapped onto *shang* in V-*shang* to show the temporal feature of the event, because the movement undergoes along the

spatial axle and temporal axle simultaneously and the temporal domain is the ideal target domain upon which the spatial domain is mapped. Thus *shang* has inchoative meaning.

   Besides the ingressive meaning, *shang* can also modify the event with other temporal features, like iterative.

   15. a. hua *shang* ji   fu   hua

            paint up   several CL painting

            paint several paintings

        b. kan *shang* san   wu   yan

            look up   three five eye

            Peek for a couple of times

   Shang in 15 bears no concrete lexical meanings as well. It makes no sense to say "*up several paintings", "*up some salt", which indicates that *shang* is neither compatible with nouns semantically nor can take on any argument syntactically. The common meaning expressed by examples in 15 is that they all show the continuous increase in number, which instantiates Lakoff's metaphor " up is more", because "if you add more of a substance or of physical objects to a container or pile, the level goes up" (Lakoff and Johnson: 1980: 16). Since *shang* has the salient image of moving upward continuously, it is quite reasonable to regard "moving up" as "increasing in number", which is based on one of the most ubiquitous experiential correlations that a change in vertical elevation is a change in amount. Besides, this increasing process is available for an open reading without salient initial or final points to delimit it, so it is better to assume that the section between the departing point and the arriving point along the motion continuum is the source domain, from which the metonymical meaning of "more" is derived. The mapping

rule applicable here is that the moving up process of the schema of *shang* is mapped as increasing in quantity. Verbs like *kan* "look", *hua* "paint" are punctual verbs, which represent some semelfactive event, but they have iterative reading with the quantification of adjuncts as in 15. This point will be further explained in Chapter 4.

   Shang in 16 expresses the meaning of completion of an action and usually this action is successfully completed or terminated. This meaning embodies the metaphor that "to reach the destination is to attain the goal". Without *shang* in these examples, the meaning of successful completion will not be as salient and explicit as now, because *shang* in Chinese symbolizes importance and positive meanings, as claimed at the beginning of this Chapter, that is to say, according to bodily experience, the degree of importance increases along the cline from low to high. It instantiates Lakoff's metaphor that "up is good and down is bad". In terms of schema, the final part of schema of *shang* is mapped onto this abstract domain to show the accomplishment of something.

   16. a. bao   *shang* le erzi   (Liu 1998)

          brace up ASP son

          get a son

       b. mai *shang* le   dianyan piao   (ibid)

          buy   up   ASP movie   ticket

          bought the movie ticket successfully

       c. qu   *shang* le   laopao   (ibid)

          marry up   ASP wife

          get married to a girl

Examples in 14, 15 and 16 can be regarded as three instances exemplifying the root mapping of "motion is change-of-state." They are partially mapped from the proto-schema of motion verb *shang*. In specific terms, the spatial meanings of motion verb—*shang* can be mapped onto non-motion or non-spatial domains to represent internal temporal features of event, to indicate the changes of state. However, it should be noted that this type of mapping is not metaphorical in nature but metonymic, since it only partially mapped among domains and that the lexical meaning cannot be fully preserved but bleached during the partial mapping.

Motion is the activity that changes the subject's location along a certain path, like from the departing point to the destination. It is a heterogeneous process, which implies that the theme's location is changed every second till it reaches the destination. Nevertheless, not every single movement or change within the moving process is salient for people's perception and cognition, but different single changes can be accumulated and finally contribute to several significant changes, which are saliently selected into people's cognitive domains. In other words, the continuum of motion can be regarded as several different stages, such as departing stage, moving stage, and arriving stage etc. Similarly, the temporal domain represented by *shang* can be correspondingly perceived as several salient stages of change-of-state along the temporal axle. For example, "the subject starts to move up", "the subject is moving up", and "the subject reaches up to the destination". Why is change-of-state able to be viewed as a mapping of change-of-location? States are stable situations and "they do not change of themselves, but require an external agency for the change into or out of the state" (Smith 1991: 37). To put it in another way, when there is force exerted on a stable situation, the stable situation comes to become unstable

and finally changes into another state. From the disturbed balance to the newly established balance, it is also a process of accumulation of single changes, which finally contribute to several cognition-salient changes. From this analysis, we learn that the underlying process of change-of-state is similar to that of "significant changes" in motion.

2.3 Summary

In this chapter, I examine three different but related senses encoded by *shang* in V-*shang* construction in a systematic way within the framework of cognitive lexical semantics. In particular, *shang* extends from its prototypical meaning to two types of peripheral meaning through the scheme of metonymy: from self-propelled motion to externally caused motion and finally to grammatical marker showing temporal features. In the analysis, I also point out that the syntactic status and lexical semantics change gradually. For example, in the first type of use, *shang* retains full lexical meaning and is able to assign the thematic role of Agent, Theme and Location; in the second type, *shang* only assigns the role of Theme and only retains the static spatial meaning and path; finally in the third type, *shang* can neither take on any argument nor is able to assign any thematic roles, because it loses all its lexical meanings. This syntactic feature strongly supports and justifies the rationality of the semantic extension route: from ego-centric meaning to other objects to the state of event. The semantic extension route of *shang* in V-*shang* can be represented as Figure 2.

This semantic extension scheme substantiates the claim made at the very beginning of this Chapter that different senses of *shang* in V-*shang* are not isolated items but correlated in a systematic and principled manner. They constitute a correlated semantic

network in which the peripheral meanings are organized around the prototypical meaning—vertical spatial meaning. The linkage between the peripheral meanings and core meaning is based on the people's life experience and cognition, as I summarize at the end of each type of meaning extension. Till now, we see a much more comprehensive and diversified picture of V-*shang* construction. V-directional, like V-*shang*, is not simply a subtype of resultative construction (Thompson 1973), or a verb complement compound (Chao 1968), but a systematic semantic network.

Prototypical meaning ⟶ extended meaning

_____

Self-propelled motion ⟶ causative motion ⟶ grammatical marker

　　　　　　　　Metonymy　　　　　　　Metonymy

_____

Full lexical meaning　　　Static spatial meaning　　　Grammatical meaning

_____

Agent (Theme) ⟶　　　Theme　　⟶　　Eventuality

Figure. 2 Semantic extension path of *shang*

The last point that is worth noting is that along the change of semantic features of *shang* in V-*shang*, the image schema of *shang* also transforms correspondingly. "Image schema is a recurring structure of, or within, our cognitive processes, which establishes patterns of understanding and reasoning. Image schemas emerge from our bodily interactions, linguistic experience and historical context" (Lakoff 1987). In our case study of *shang*, the upward movement of people/object is preserved, abstracted and finally schematized into consistent and highly abstract spatial relations. It is not only important to embody the spatial relations but more important to organize the knowledge of a particular concept. For instance, in the first type of V-*shang*, *shang* embodies the proto-

schema, from which many transformed schemas are derived, where the proto-schema are partially mapped onto the targeted domains. The proto-schema and transformed schema represent different meanings of *shang* and the transformation shows how the meanings are derived and correlated with each other. From this evidence, we see that the schema of *shang* plays an important role for organizing different senses of *shang* in the scope of lexical semantics.

CHAPTER 3 EVENT STRUCTURE OF V-*SHANG* CONSTRUCTION

3.1 What is event structure?

In the previous chapter, a detailed description of the semantic network of *shang* in V-*shang* construction is worked out. Not all the semantic information embodied by *shang* is relevant to the grammatical behavior of *shang*. In this chapter, on the basis of the semantic network in Chapter 2, I will figure out the grammatically related semantic elements, that is, those that are related to argument realization of verbs. In particular, we will make explicit the event structure of these three types of V-*shang* to see the internal relation between V and *shang* in V-*shang*. The hypothesis of this chapter is provided as follows.

Since the 1980s, many theories of grammar have been built on the assumption that many facets of the syntactic structure of a sentence are projections of the lexical properties of its predicator—its verb or argument-taking lexical item (c.f. Chomsky 1981; B.Levin & R. Hovav 2005:7). It is commonly assumed that only certain facets of word meanings are relevant to argument realization (Davis 2001, Grimshaw 1993; Jackendoff 1990; B. Levin 1999; Pinker 1989; T. Mohanan and K.P. Mohanan 1999; Rappaport Hovav and B. Levin 1998; c. f. B. Levin and R. Hovav 2005:10). One of the most explicit statements of this hypothesis is made by Pinker (1989:166): "Perhaps there is a set of semantic elements and relations that is much smaller than the set of cognitively available and culturally salient distinctions, and verb meanings are organized around them".

In the current paper, I follow Tara Mohanan and K.P.Mohanan (1999)'s hypothesis that the grammar includes a level of representation that specifies all and only the semantic information relevant to grammar. This level, semantic structure representation (SEM STR) interacts with phonology, morphology and syntax directly. Mohanan & Mohanan (ibid: 26-7) also impose some restrictions on the semantic representations:

17. a. All and only grammatically expressible meanings are represented at the level of Semantic Structure.

b. Semantic Structure Representations are built out of a universal inventory of structural units.

As regards hypothesis 17.a, the level of Semantic Structure refers to the "semantic elements and relations" as claimed by Pinker above (their differences will not be addressed here). As regards hypothesis 17.b, echoing "the universality of certain basic conceptual and phenomenological structures", they assume the universal inventory to consist of the basic semantic unit [EVENT], with its subclasses [Es] (state event), [Ea] (activity event) and [Ep] (process event, including [Eacc] (accomplishment event) and [Each] (achievement event)), as well as structural units like [CAUSE], [ACT], [STATE] and [BECOME], with (x), (y) and (z) denoting semantic participants. Thus [x CAUSE Ea] would mean 'x cause an activity event', while [x ACT] and [x ACT y] would represent respectively, the monadic event 'x act' and the dyadic event 'x act upon y'. So it is at the level of semantic structure representation that we find the event structure representation and the interface between semantics and syntax.

Vendler (1967) defines four types of event: State, Activity, Accomplishment as well as Achievement. Here I provide the interpretations given by Smith (1991) for reference.

18. a. "States consists of an undifferentiated period. They do not change themselves." (ibid: 37).

b. "Activities consist entirely in the process, because they do not have an associated outcome or change of state" (ibid: 45).

c. "Accomplishments consist of a process and an outcome, or change of state, and the change is the completion of the process" (ibid: 49).

d. "Achievements are instantaneous events that result in a change of state. If preliminary stages are associated with the change of state, they are detached conceptually from the event itself" (ibid: 58).

According to Smith's illustration, I suggest that there are two main types of event: simple event and complex event. Complex event differs from simple event in that complex event consists of more than one subevent. In particular, States and Activities are simple event with only one subevent, and Accomplishments and Achievements are complex events, both of which include a State as the temporally final subevent. Moreover, Accomplishments are distinguished from Achievements in that only the former include an Activity as their temporally initial subevent. In other words, Accomplishments are complex events in which an Activity (or action) brings about a State. Achievements are complex events in which a State comes to be by itself. The argument realization of these four types of event can be projected as follows.
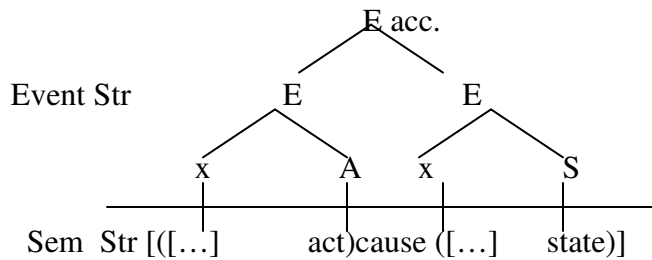
19. a. State: Mary is happy.
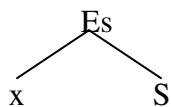
"Marry is happy" refers to a particular state at a particular time. It is a simple event.

b. Activity: They are building the house

$$
\begin{array}{ccc}
 & \text{Ea} & \\
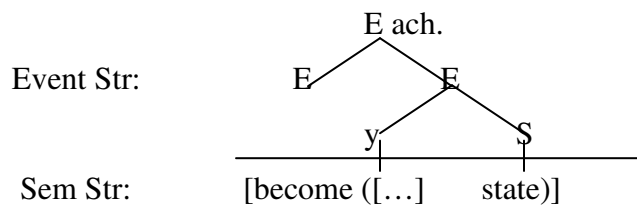 & \diagup\ \diagdown & \\
\text{x} & & \text{A}
\end{array}
$$
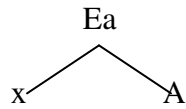
"Building" here is a process which consists of homogenous stages and does not have an associated outcome or change of state. Therefore, it is still a simple event consisting of the subevent of Activity.

c. Accomplishment: They built a house last year.

Event Str

E acc.

$$
\begin{array}{cccc}
\text{E} & & \text{E} & \\
\text{x} & \text{A} & \text{x} & \text{S}
\end{array}
$$

Sem Str [([…]   act)cause ([…]   state)]

This event is composed of two subevents: the process of building and the result—a house was built. Especially, the relationship between these two subevents is Causer-Caused. From this example, we learn that Accomplishment is a complex event which is composed of the subevents of Activity and State.

d. Achievement: The ice melts.

Event Str:

E ach.

$$
\begin{array}{ccc}
\text{E} & & \text{E} \\
 & \text{y} & \text{S}
\end{array}
$$

Sem Str: [become ([…]   state)]

The intended interpretation is that the ice changes its stage from ice finally to water, which focuses more on the final result or state. With regard to the process of how ice melts, it is not saliently represented or specified but it actually exists in reality. It is still

justifiable to regard Achievement as a complex event, which is composed of a non-salient causing event and a caused state.

3.2 *Shang* as independent verb

In 2.2.1, we have defined the spatial meaning of "moving from low to high along a certain path" as the prototypical meaning of *shang*, either as independent verb or in V-*shang* construction. Though both of these two types of *shang* represent the motion event, different event structures are induced due to their different syntactic environments. Let us work out the event structure of *shang* as independent verb first.

20. wo   *shang*   lou   le.

    I   up   stair   ASP

    I am upstairs. / I have arrived upstairs/ I am going upstairs.

21. che   dao le   xia yi zhan you *shang* le   ji   ge   ren.

    Bus   to   ASP next one stop   again up   ASP several CL   person

    When the bus arrived at the next stop, several other people got on.

In 20 and 21, independent verb *shang* acts as a typical motion verb which conceptualizes a Motion event. Motion event refers to "a situation containing motion and the continuation of a stationary location alike. The basic Motion event consists of one object (the Figure) moving or located with respect to another object (the reference object or Ground)" (Talmy 2000:25). We analyze a Motion event into four components: Figure, Ground, Path and Motion. "The Path is the path followed or site occupied by the Figure object with respect to the Ground object. The Motion refers to the presence per se of motion or locatedness in the event" (ibid: 25).

Motion lexicalized by *shang* consists of two temporal stages—the moving process of Figure—movement (Stage 1) and its final location—locatedness (Stage 2). Movement and locatedness are two sequential parts within the Motion event. In terms of schematic image, the schema of verb *shang* is composed of two stages (see Fig. 3), and it is a coherent singular unit not a compositional unit.
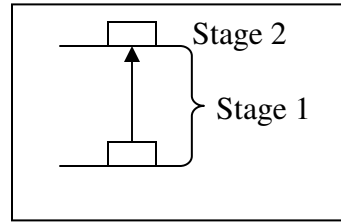

Figure.2 Schema of Motion event

According to the schema and semantic features of *shang*, this Motion event is available for three interpretations in terms of event structure —State, Activity or Achievement—in different contexts. If the schema of movement is highlighted, it can be event type of Activity, since it represents a homogeneous dynamic process. If locatedness is highlighted, it can be State, because the locatedness of the Agent is durative and will not change without extra forces. If both movement and locatedness are given salience, it can be Achievement rather than Accomplishment. For instance, 18 can be interpreted in the following three ways.
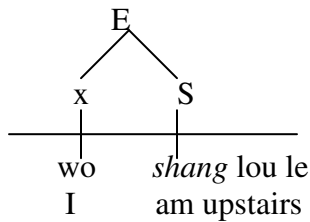
22. a. I am upstairs.   [State]

   b. I am going upstairs.   [Activity]

   c. I have arrived upstairs.   [Achievement]

Why is 22.c treated as a complex event of Achievement rather than Accomplishment? Firstly, the movement of *shang* is a homogeneous process which is [-telic], and locatedness of *shang* is the final ending point of the movement, in other words,
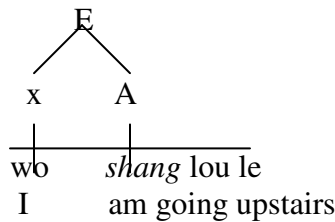
35

locatedness delimits the movement, so when both of movement and locatedness are saliently represented, the whole event is [+telic]. Secondly, movement and locatedness are not two sub-events but two sequential parts of Motion event. Though movement precedes locatedness, the causative relation is not explicitly specified, because in the self-propelled use of *shang*, the Agent is also the Theme, and the causer and the caused are realized by one NP argument. That is, the final state of the event comes to be "by itself" rather than to "be brought about" by some external factors. Thirdly, the metonymic mapping of "motion is change-of-state" is so pervasively noticed that locatedness can be naturally regarded as a kind of state. Based on these three points, we claim that Motion event can be interpreted as Achievement which is composed of one unspecified causing event and one internally caused state.

Now we represent the event structures of these three interpretations as follows. State is a simple static event, Activity is a simple dynamic event and Achievements are complex events in which a state comes to be.

23. a. State


```
              E
             / \
           x     S
        ___|_____|___
          wo    shang lou le
          I     am upstairs
```

b. Activity


```
              E
             / \
           x     A
        ___|_____|___
          wo    shang lou le
          I     am going upstairs
```

36

c. Achievement

```
              E
            /   \
          E       E
                 / \
                y    S
    _____|_____|_____
              wo    shanglou le
              I      have arrived upstairs
```
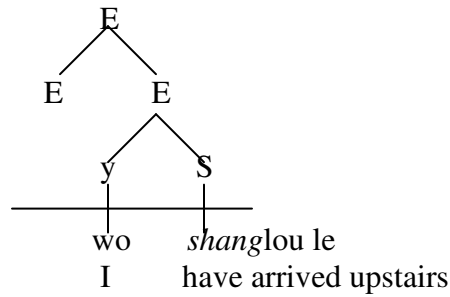
Vendler's (1967) four-way aspectual classification arouses many criticisms, "it works well at the lexical level, but not at the sentential level", and "it is inadequate as an account of temporal meanings arising from arguments and non-arguments" (Smith 1991, Xiao and McEnery 2005) Our discussion of motion verb *shang* exposes the same problem pertaining to Vender's classification: according to the contexts, an isolated sentence like 20 can be interpreted as different event types such as State, Activity and Achievement; in other words, the aspectual meaning is denoted far beyond the argument realization at the lexical level. In order to avoid this problem, we will only focus on studying the event structure of V-*shang*. One of the advantages of the narrowed focus is that it provides us with a syntactic environment, NP1 + V + *shang* + NP2, which makes it possible to investigate the event types at a much higher level than at the lexical level. The combination of V and directionals like *shang* is treated as a productive construction that has certain constructional meanings. The constructional meaning is operated at a basic level to the aspectual meaning realization than pragmatic factors from the context or from aspectual marker like *le*. However, the previous researches all take the well-accepted generalization that V-directional is a subtype of RVC and the event type of RVC is Accomplishment and its aspectual meaning is perfective. In the rest part of this chapter, we will challenge this unanimously agreed generalization by analyzing the subtle internal

relations between V and *shang* in three different subtypes of V-*shang* and representing them via different event structures.

　As I discussed before, the proto-schema of verb *shang* is the motion from low to high. It includes two temporal sections of movement and locatedness. In English, both 'up' and 'on' are satellite to verb and they embody two different schemata. The ideal meaning of "on" is that "for a geometrical construct X to be contiguous with a line or surface Y; if Y is the surface of an object Oy, and X is the space occupied by another object Ox, for Oy to support Ox" (Herskovits 1998: 140). "up" is the preposition of path, and "go up" means "go higher than before" and "be up (from X)" means "be higher than X" (Lindstromberg 1997: 183). The schema of *shang* in Chinese is represented by "up" and "on" respectively in English. 'up' is equivalent to the first stage of Motion event of Chinese *shang*, 'on' is equivalent to the locatedness of Motion. That is why *shang* can either represent Activity or State, or even complex event consisting of Activity and State. Activity:

24. a. The grass is up.　　　　　　　　　　　　　　　　　[vertical]

　　b. Climb up to the summit　　　　　　　　　　　　　　[vertical]

　　c. Just go up this road.　　　　　　　　　　　　　　　[horizontal]

　　d. Go up to the management level of the company.　　　[social hierarchy]

State:

25. a. The coat on the hanger　　　　　　　　　　　　　　[locatedness]

　　b. The label on the box　　　　　　　　　　　　　　　[locatedness]

　　c. The man on the chair　　　　　　　　　　　　　　　[locatedness]

The semantic features of *shang* as independent verb embodied at the level of semantic structure can be represented as follows:

It represents a Motion event, which entails two sequential temporal sections —movement and locatedness. Due to the interaction with vantage point and contextual information, the Motion event can represent the event of State, Activity and Achievement. It has the semantic features of [+movement], [+path] and [+locatedness]. It bears three thematic roles—Agent, Theme and Location, but Agent and Theme are embodied by one NP argument in this case, which features an internal causative event.

3.3 *Shang* in V-*shang* construction

The event structure of independent verb *shang* is primarily denoted by the semantic features of *shang* and meanwhile affected by contextual information and some aspect markers, like *le* (perfective aspect), *zhe* (progressive aspect), *guo* (perfect aspect), or aspectualizers, like *kaishi* "start" etc. In terms of the event structure of V-*shang* construction, it is a much more complicated case where there are semantic confusion and competition between V and *shang* and moreover V-*shang* also has some constructional meanings shared with V-V construction.

As reviewed in Chapter 2, V-directional is traditionally regarded as a subtype of RVC, and directionals are viewed as verb complement with consistent syntactic status and resultative meanings across different examples (Chao 1968, Thompson 1973, Charles Li and Thompson 1981; Xiao and McEnery 2004). For example, Thompson (1973: 361) defines RVC as a compound verb made up of two parts, the first indicating the action and

the second the result of that action, which is characterized as causative relation. Take *Ta la kai le men* / "He pulls the door open." for example (Thompson 1973: 361). She explains that the second predicate "open" shows the result of the first predicate "pull", and they are characterized by causative relations.

In this section, two questions will be addressed: (1) "Does *shang* show the result of action and act as the complement to the previous verb in all the cases?" (2) "What are the differences of the three types of V-*shang* in terms of event structure?"

The traditional treatment of RVC is mainly based on the sequentiality of serial verbs in the clause (Thompson 1973, Li and Thompson 1981, Hansell 1993). Sequentiality refers to the fact that in some languages like Chinese, a series of verbs are used together in one clause and their sequence is decided by that of events. Given two verbs V1 and V2 in any kind of construction, if ordering of events in time is being expressed, then V1 + V2 will represent a situation where the action or event encoded by V1 precedes the action or event encoded by V2. Nevertheless, some also strongly assume that "the notion of causality or purposefulness presupposes sequentiality, and this sequentiality in real-world events is iconically represented as Causer-Causee elements in syntax" (Hansell 1993). The hypothesis of sequentiality can be justified according to the iconicity rule, but the second hypothesis of purposefulness presupposes sequentiality is over-generalized. Because not all V1-V2 will express causative meanings and this is not the whole picture of serial verbs. For example, the topological study of serial verbs reveals that serial verb construction can also express goal or direction of motion, purpose, manner, resultative in addition to causation (Kroeger 2004:227-8).

In Talmy's (2000: 213) terms, a macro-event is a certain type of event complex, which can be conceptualized as composed of two simpler events and the relation between them. In particular, in a macro-event, there can be a framing core event and a co-event, the former refers to motion, temporal contouring, state changing, action correlating realization, while the core-event can be precursion, enablement, cause, manner, subsequence and constitutedness etc (ibid: 220-1). In our case study of V-*shang*, V and *shang* can be conceptualized as two subevents within the complex event (macro-event), while either V1 or V2 is possible to function as core event or co-event. Besides, we also learn from Chapter 2 that *shang* can also act as a grammatical marker to V1, where *shang* can not represent an isolated subevent. Thus there are three available relations between V and *shang*, as shown in 26.

26. a. V1 (co-event) + *shang* (core event)

b. V1 (core event) + *shang* (co-event)

c. V1 (core event) + *shang* (grammatical marker)

The traditional treatment of V-*shang* as RVC or causative is only the possibility of 26.b, where V and *shang* represent two different subevents and the event lexicalized by V causes the event lexicalized by *shang*, so *shang* is the resultant complement to V. Yet the other two distinctive structures and meaning potentials of V-*shang* are neglected. The argument realization and syntactic features are closely related to the semantic elements. Our classification of event types proposed here is based on the semantic change of *shang* in V-*shang*, where *shang* extends from spatial meaning to stative spatial meaning and to grammatical meaning finally. These three types of V-*shang* will be distinguished in terms of event structure in the following part.

An important hypothesis is proposed before going on the elaboration of event structure of V-*shang*. If *shang* retains lexical meaning, V-*shang* has Achievement event; if *shang* retains its stative use and acts as the resultative complement, the event type of V-*shang* is Accomplishment; if *shang* is grammaticalized, the event type of V-*shang* is State.

3.3.1 Type 1. V-*shang* as Achievement: *shang* with full lexical meaning

The first type of V-*shang* bears the greatest similarities to the independent verb *shang*. It acts as a prototypical motion verb and has the similar spatial meaning and spatial image.

27. a. ta   tiao *shang* qiche.

       He jump up   bus.

       He jumped on the bus.

    b. Ta tiao qiche le.

       He jump bus ASP.

       He jumped from the bus.

    c. ta *shang* le   qiche.

        He up   ASP bus.

        He got onto the bus.

28. a. women deng *shang* changcheng le.

        we   climb up   long wall ASP.

        We climbed on the Great Wall.

    b.Women deng   le   chang cheng .

       We   climb ASP long wall   ASP

       We climbed the Great Wall.

c. Women *shang* changcheng le.

We   up   long wall ASP

We have climbed up the Great Wall.

29. a. zou *shang* wutai.

walk up   stage

walk onto the stage.

*b. zou   wutai.

walk stage.

walk the stage.

c. *shang* wutai.

up   stage.

go up to the stage.

30. a. Women pao *shang* shan.

We   run up   hill

We ran up to the hill.

*b.Women pao *shan*.

We   run   hill.

We run the hill.

c. Women *shang* shan.

We   up   hill

We go to the hill.

The particular association function that sets the figural entity into a particular relationship with the ground entity is called the core schema (Talmy 2000: 218). In our

examples, this association function is realized by *shang*. The semantic feature and the schematic image of *shang* tell us that *shang* is qualified to play such a role—first to move and then to locate, because *shang* has the semantic feature of [+path], [+movement] and [+locatedness]. From another perspective, the schematic image of motion verb *shang* is wholly mapped onto *shang* in V-*shang,* so in these four examples, a and c express the same spatial meaning and represent the same spatial schema.

Though V in the above four examples indicates manner of motion, they demonstrate some subtle differences. In 27 and 28, in addition to the semantic feature of [+ manner], V like *tiao* 'jump', *deng* 'climb' and *sheng* 'ascend', implies an intrinsic path, usually upward or downward, so its semantic features can be represented as [+manner], [+movement] and [+path]. That is the reason why b in 27 and 28 are accepted and they can represent a telic event (a happened event) with the modification of aspectual markers like *le.* In 29 and 30, b is not acceptable. Though V like *zou* 'walk', *pao* 'run', are manner verbs too, they usually do not have the semantic element of [+path], so they could not represent any real Motion event by themselves. When V is used with Ground nouns such as in 27 and 28, they are incompatible both semantically and schematically.

The semantics of V and *shang* in the first type represented at the semantic structure can be expressed as follows:

> *Shang* is a motion verb with full lexical semantics of [+movement], [+locatedness] and [+path], and with these three features, it represents the Motion event. There are two types of V: one is featured by [+manner], [+movement] and [+path] and it relies on aspectual markers to denote telic event; the other is featured by [+manner], [+movement], it can not represent

any event of motion by itself due to the lack of [+path]. Therefore, in the first type of V-*shang*, *shang* has the most salient verbal feature and the strongest argument-taking ability, so *shang* represents the core-event of motion and V is more apt to represent the co-event of manner.

I claim that Motion event represented by V-*shang* is Achievement, where *shang* retains full lexical meaning as a prototypical motion verb. Achievement is a complex event in which the state comes into being and the initial event is not explicitly specified. V is defined as a manner verb, because it happens simultaneously with the motion of *shang*, and it does not represent the initial event. Besides, the manner verb only represents how the motion is realized and it is the accompanying feature of motion. Therefore, there is no external force exerted on *shang* from V; in other words, it is impossible for V to represent a specified initial event that brings about a result. *Shang* is featured with [+movement], [+path] and [+locatedness] and it is eligible to represent a core-event of Motion. It includes two stages of motion—the agent firstly moves and finally locates somewhere. Here, *shang* lexicalizes a self-propelled Motion event, where the Agent changes his own situation. It is similar to the "internally caused eventuality" in L. Beth and M. Rappaport (1995). The internally caused eventualities refer to the fact that "some property inherent to the argument of the verb is "responsible" for bringing about the eventuality" (ibid: 91). The self-propelled action implied that the agent initiates the action and meanwhile he himself also undergoes changes. To put it in a plain way, Motion event features a self-caused change of location, or an unspecified event leads to a particular state. Thus Motion event is Achievement.

In sum, in terms of the first type of V-*shang* construction, V represents the co-event of manner and *shang* is a motion verb, lexicalizing a complex eventuality of Motion event, which is composed of the subevents of movement and locatedness respectively. And its event type is Achievement. The internal relationship between V and *shang* can be represented as the following event structure.

Eacc
E   E
x   motion   manner
agent   *shang* Ground   V
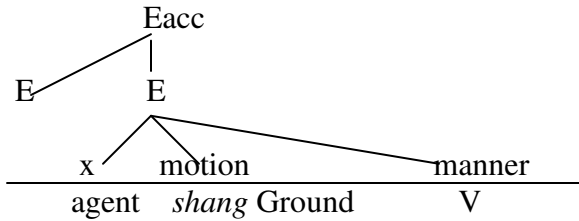
3.3.2 Type 2. V-*shang* as Accomplishment: *shang* with static spatial meaning

In 2.2.2.1, we learn that *shang* is no longer a typical motion verb but simply indicates the final result of the preceding activity. In this section, the internal relationship between V and *shang* will be visualized in terms of event structure.

31. a. wo chuan *shang* yifu.

    I   wear   up   clothes.

    I put on the clothes.

    b. Wo chuan yifu.

    I   wear clothes.

    I put on the clothes.

   *c. Wo *shang* yifu.

    I   up   clothes.

    I put on the clothes.

32. a. ta gua *shang* chuanlian.

   He hang up curtain.

   He hangs the curtain.

   b. ta gua chuanglian

   he hang curtain

   He hangs the curtain.

   *c. Ta *shang* chuanglian

   He up   curtain

   He hangs the curtain.

Obviously, here, *shang* is not a motion verb any more to represent a core-event, because it can not be conceived as "contributing the factor of dynamism to the event" (Talmy 2000: 218), because its schematic image of 'movement' is not saliently represented and its verbal feature is greatly shadowed by the preceding verb. With the bleaching of verbal features of *shang* in V-*shang*, only the static semantic elements of [+locatedness] and [+path] are given certain degrees of salience to show the final location or resultative state of the causing activity.

31.c and 32.c are not acceptable; the reason lies in that the partial mapping of *shang* image (the mapping of locatedness) makes *shang* ineligible to taken on the argument of Agent, or to show the activity of Agent. On the contrary, the mapping of locatedness makes *shang* more suitable to represent the resultant state caused by V. V in this type has the disposal meaning of changing the thing's location or state. It suggests that now V is capable of fulfilling the "association function that sets the figural entity into a particular relationship with the ground entity" or of "contributing the factor of dynamism of the

event" (Talmy 2000: 25). In this case, V lexicalizes the core event while the *shang* lexicalizes the co-event of result. In contrast to the simultaneous anchoring relation of core event and co-event in the first type of V-*shang*, the core event and the co-event are two separate events in sequential order and specifically the core event causes the co-event in the second type of V-*shang*.

The event type of V-*shang* here is Accomplishment, which is composed of two sequential subevents, Activity and State. Their sequential order is the embodiment of the iconicity rule, mapping the happenings in the world onto a series of events in sequential order. However, a more basic logic constraining subevents is the causative relation among them. This notion of causality or purposefulness presupposes sequentiality, and this sequentiality in real-world events is iconically represented as Causer-Caused elements in syntax. In a complement construction like *chuangshang yifu* "put on the clothes", *chuan* precedes *shang* and moreover, the action *chuan* causes the state of the clothes—being *shang*. Though this hypothesis is over-generalized and does not specify the compositional features of the other types of V-*shang* as I explained in 3.3, it works well in the RVC or resultative complement construction. Causality is directly and unambiguously expressed by verb concatenation in the resultative complement construction.

Rothstein (1983) makes a clear claim about the resultative complement that "resultative predicates" describe the effects on the object of the action described by the verb; or the end state of the object in the event described by the verb. If we can find the evidences from Chinese data to prove this claim, then RVC in Mandarin would be a member of the resulative families.

In this type of V-*shang*, V has direct causative effects on the object. V takes on two arguments—the causing argument and the caused argument; in another word, V should be a transitive verb. That is why b in 29 and 30 are acceptable. But semantically, V only lexicalizes the causing activity, as for the result of the causing activity, that is, how the resultant state of object comes into being under the effects of V, it is realized by secondary predicate—*shang*. Echoing Rothstein's claim, in the second type of V-*shang*, *shang* describes the effects on the object of the action described by V and it shows the resultative meaning of V. To put it another way, the causing event lexicalized by V is dynamic Activity, while the caused event describes the final result of the action, and it is State, which can be regarded as the ending point of activity or to delimit the Activity. So these two subevents comprise the whole event structure of V-*shang* — Accomplishment, which is [+telic]. In V-*shang* construction, *shang* is the secondary predicate, which specifies the effects on the object by V, and it is better to treat *shang* as complement of V but not an attachment to V. RVC in Mandarin describes a resultant state which is caused by the action denoted in the primary predication. This analysis of Chinese resultative complement construction fits Rothstein's claim quite well and it can be concluded that RVC in Mandarin is a member of resultative family.

$$[([\ldots]\ act)\ cause([\ldots]\ locatedness)]$$
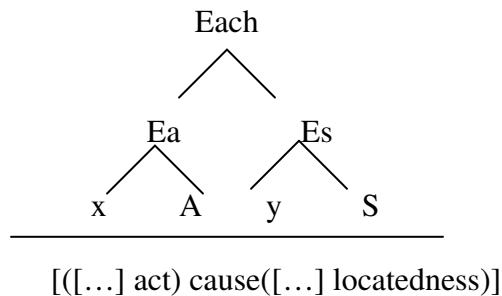
The event type of the second type of V-*shang* is Accomplishment. The semantic features of V and *shang* encoded at the level of semantic structure are illustrated as follows:

Shang has lost some of its verbal features and only retains its static semantic element: [+locatedness] and [+path], which represents the direction of movement and the resultant state caused by V. V has the semantic feature of [+disposal], and it can be tested by *BA* construction in Mandarin.

Consider the following examples, where typical SVO order is transformed into SOV order with the marker of *BA*.

33. a. wo chuan *shang* le   xin yifu.

  I   wear   up   ASP new clothes

  I put on the new clothes.

 b. Wo *ba*   xin   yifu   chuan *shang* le.

  I   *BA* new clothes   wear   up ASP

  I put on the clothes.

34. a. ta gua *shang* chuanlian

  he   hang up   curtain

  He hung up the curtain.

 b. Ta *ba* chuanlian gua *shang*.

  He *BA* curtain   hang up.

  He hung up the curtain.

With the marker of *Ba*, predicate like V-*shang* can be post-positioned, but the syntactic relation between predicate and NP argument remains the same. The *Ba* sentence has a

number of distinguishing semantic characteristics. The Chinese linguist Wang Li (1947) has called it the 'disposal form.' More specifically, "[t]he disposal form states how a person is handled, manipulated, or dealt with; how something is disposed of; or how an affair is conducted" (translation by Li [1974:200-201]). Li & Thompson (1981) add to this that "disposal has to do with what happens to the direct object" (ibid: 468) and the object of *Ba* is the entity directly affected by the event. "*Ba* forces elements that form a resultative structure to occur in its clausal complement; *Ba* construction takes perfective viewpoint, and has verb and object components that are telic" (Blumenfeld, 2001). Based on this analysis, *Ba* construction can be regarded as a kind of causalitivizaition *Ba*, which implies that *Ba* connects the cause predicate and the caused predicate in the semantic structure. So the second type of V-*shang*, that is, the external causative construction, can be tested by *Ba* construction. If V-*shang* can be transformed into *Ba* construction, V can be regarded as the external causative force to cause the change of object and *shang* is the complement to V to show the state of object. Moreover, the V-*shang* construction is a member of resultative family.

Following the analysis of this section, I make the assumption that the event of Accomplishments is constrained by the external causative link and the event of Achievement is constrained by the internal causative link. In the previous sections, the concepts of internal causative and external causative are briefly introduced. For example, verbs like *chuan* 'wear', *gua* 'hang', describe "eventualities that are under the control of some external cause that brings such an eventuality about" (Smith 1990: 107). Verbs like *shang* 'ascend', *dao* 'reach' do not have this property, but can be controlled by the person engaged with it; that is, control "cannot be relinquished" to an external controller" (ibid).

To put it in another way, external causative eventuality usually have the two arguments to bear the thematic roles of Agent and Theme, and the Agent takes a causative action that has direct effects on the Theme. In terms of force dynamics, there exists external force transmission between Agent and Theme in an explicit mode. In terms of internal causative eventuality, the subject controls and affects himself and the subject embodies the role of Agent and Theme at the same time. Here, the force does not pass from one subject to another in an external mode, but exerts from inside and meanwhile consumes inside.

Accomplishment and Achievement are complex events, both of which include a state as the temporally final subevent. And they distinguish from each other only in that Accomplishment includes an activity as its temporal initial subevent and that Achievement does not have that explicitly specified initial subevent. From our case study of V-*shang*, we learn that the event of Accomplishment has a temporally initial subevent represented by V and a final subevent represented by *shang*, and more specifically, the underlying relation between these two subevents is causative, which means the state of *shang* results from the initial action of V. Explicitly, the initial subevent represents what the Agent does to the Theme, which is "an imperfective process" (Smith 1991), while the final subevent represents what effects is on the Theme under the influence of the Agent and it delimits the imperfective process. It is clear now that Accomplishment event is constrained by an external causative link between Agent and Theme at the base. The Motion event is a typical example of Achievement. Motion event lexicalized by V-*shang* exemplifies an internal causative eventuality, where the Agent moves by himself and the causing subevent is not specified though there is such a process, because this causing

process is taken by the Agent himself. Therefore, this type of Achievement is featured by some kind of internal causative relation.

3.3.3 Type 3. V-*shang* as State: *shang* with no lexical meaning

In the discussion of the first two types of V-*shang*, we find that *shang* encompasses verbal features to some degree and it can represent an event or subevent. However, in the third type of V-*shang*, the syntactic status and semantics of *shang* have changed dramatically. From Chapter 2, we have known that its lexical meanings of motion and path are greatly bleached and its independent syntactic status has lost; in other words, it functions as a grammatical word and it can only exist as an attachment to V in V-*shang* construction. Now let us represent its semantic features in terms of event types.

35. a. ta   he   *shang* ji   bei   bai   jiu   jiu   zui   le

    he drink up   several cup white wine then drunk ASP

    After taking a few glasses of alcohol he became drunk.

    b. ta   he   ji   bei   bai   jiu   jiu   zui   le

    he drink several cup white wine then   drunk ASP

    After taking a few glasses of alcohol he became drunk.

    *c. ta   *shang* ji   bei   bai   jiu   jiu   zui   le

    he   up   several cup white wine then drunk ASP

    After taking a few glasses of alcohol he became drunk.

36. a. Ta lian   *shang* le   taiji

    He practice up   ASP taiji

    He takes to practicing taiji.

b. ta lian   le   taiji.

   He practice ASP   taiji

   He practices taiji.

*c. ta *shang*   le   taiji.

   He up   ASP taiji

   He practices taiji.

37. a. Tamen guo *shang* le   xingfu de   wan nian.

   They   pass up   ASP happy   DE late year

   They lived up a happy life in their old age.

b. tamen guo   le   xingfu de wan nian

   they   pass   ASP happy   DE late year

   They live a happy life in their old years.

*c. Tamen *shang*   le   xingfu de wan nian

   they   up   ASP   happy DE late year

   They live a happy life in their late years.

In a of 35, 36 and 37, *shang* is deprived of the verbal meaning of [+movement] and [+locatedness], so it can not take on any argument. It sounds ridiculous of c in 35, 36 and 37. Due to the bleaching of its lexical meanings, *shang* functions as a suffix to V to change the internal temporal structure of the event represented by V.

Meanwhile, it is obvious that the features of V here are also distinctive from that in Types 1 and 2. V of type 1 expresses the manner of motion and V of type 2 features the disposal meaning. But in this type of V-*shang*, almost all verbs with the semantic feature of [+performative] can be combined with *shang*. This point also supports our argument

that the grammatical status of *shang* has been strengthened to great extents, because when *shang* acts as a grammatical word, the semantic harmony between V and *shang* matters little and the collocation ability of V-*shang* is greatly expanded. In other words, V-*shang* can be highly productive in the third type. In our case, if and only if V is featured with [+performative], they can co-occur with *shang*. Since *shang* has no concrete lexical meaning, there is no sequential order from V to *shang*, no Causer-Caused relation between V and *shang*. Here, V is the verb-head, which has direct control over the arguments in the clause; *shang* is a grammatical marker to indicate the temporal features of the event lexicalized by V. As regards the question that how the internal temporal structure is changed by *shang*, it will be discussed in terms of viewpoint aspect and meta-aspect in Chapter 4.

It is worth noting that descriptive verbs or stative verbs are not allowed to fill the position of V in the construction. Thus the following examples of 36 and 37 are not acceptable. Since *shang* plays the role of changing the state of eventuality lexicalized by V, but the stative verbs express static meaning which denotes no changes, they are incompatible semantically.

38. *Ta zhidao *shang* le.

   He know   up   ASP.

    He comes to know.

39. *Ta pingjing *shang* le.

    He calm   up   ASP.

    He becomes calm.

Stative verb 'love' is an exception to the above rule, because in Chiense "love" has very strong performative meaning, which is equivalent to dynamic meaning of "fall in love with somebody" in English. So *ai shang ta* "fall into love with him/her" is acceptable and widely used in Chinese.

In terms of event structure, the whole eventuality of V-*shang* is State, which is composed of the only subevent of Activity as well as the grammatical modifier *shang*. Now the question is that how an activity with a grammatical marker can become a kind of state. The event type of b in 33, 34 and 35 is Activity, which emphasizes either a single happened event or processes which is telic or can be terminated. With the modifier *shang*, its internal temporal structure changes. Firstly, *shang* can change the lexical span of a verb constellation by adding an extra state to the event lexicalized by V, as in 36.a. Secondly, with *shang* and adjuncts, a single event can be repeated or quantified as a kind of increasing state, as in 35. a.

Es

```
        Es
       /|\
      / | \
     x  A  shang
```

x   A   *shang*
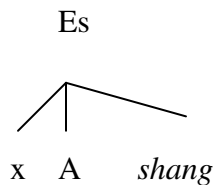
The event type of the third type of V-*shang* is State, where *shang* has lost all its lexical semanics. The semantic features of V and *shang* is elaborated as follows:

V with the semantic element of [+performative] can be used with *shang*.

The basic meaning of *shang* is grammatical and it changes state of the event lexicalied by V. Specifically, it changes the internal temporal structure of the eventualities.

3.4 Summary

Till now, I have answered the two questions thrown at the beginning of this section. *Shang* is not always a complement to V or a subevent caused by V in V-*shang* construction, and it contains three different types of syntactic relations and event structures.

	Event types of V-*shang*	Semantic features of V	Semantic features of *Shang*
Type 1 V(co-event) + *shang* (core-event)	Achievement	[+manner]	[+movement] [+location] [+path]
Type 2 V(core-event) + *shang* (co-event)	Accomplishment	[+disposal]	[+location] [+path]
Type 3 V(core-event) + *shang* (grammatical marker)	State	[+performative]	No lexical meaning

During the process of meaning extension, another line that is closely related to the semantic change and syntactic status of *shang* is the mapping of schema of *shang*. In V-*shang* construction, if the schema of verb *shang* are fully mapped onto *shang* in V-*shang*, then *shang* is still a full-fledged motion verb. If only the second stage of schema is mapped, then *shang* is a complement to V and shows the resultant state of the activity. If part of the movement schema is mapped (partial mapping), then *shang* loses all its verbal features and related lexical meanings but evolves with more grammatical meanings and acts as a grammatical suffix.

CHAPTER 4 THE ASPECTUAL MEANING OF V-*SHANG* CONSTRUCTION

4.1 A three-level aspect system

Aspect traditionally refers to the presentation of events through grammaticalized viewpoints such as perfective and imperfective (c.f. Smith 1991:3). It reflects the vantage points or the perspectives of the speaker. For example, a and b in 40 refer to the same event or happening, but the speaker adopts different perspectives to construe the event.

    40. a. My father made a chair this morning.

        b. My father was making a chair this morning.

In particular, 40.a refers to a making event that occurred in its entirety, in other words, it implies the completion of an event; in contrast, b denotes that a making event is in progress. This kind of aspectual meaning "licenses the receiver to make specific and pragmatic inferences about the situation presented in a sentence", namely "viewpoint aspect" (Smith 1991: 94). Perfectives and imperfectives are identified as two main viewpoint types. Sentences with a perfective viewpoint present a situation as a single whole. The span of the perfective includes the initial point (I) and final endpoint (F) of the situation. Perfectives may emphasize completion or termination rather than the occurrence of an event as a whole, but need not do so (Smith 1991: 105). The general schema for the perfective is repeated as follows.

<div align="center">

I   F

/////////

Figure. 4 Schema of perfective aspect

</div>

Imperfective viewpoints present a situation from an internal vantage point. They are realized formally by a viewpoint span that includes neither the initial nor final points of a situation. The general imperfective temporal schema is illustrated below.

I .. ///////////// .. F

Figure.5 Schema of imperfective aspect

Recently, the term "aspect" has been broadened to include "the structural properties of the eventualities" (Rothstein 2004), which is called situation aspects or event types. The classification of event types is mainly based on the temporal features of predicates such as "dynamicity", "durativity" and "telicity". In our study of V-*shang* in Chapter 3, we learn that different event types of V-*shang* are closely related to the semantic elements of both V and *shang*. The event type of the first type of V-*shang* is Accomplishment, where *shang* is characterized with two intrinsic features of [+movement] and [+locatedness]; the second type of V-*shang* is Accomplishment, where V is [+disposal] and *shang* is simply [+locatedness] and V and *shang* are linked by causative links; the third type of V-*shang* is State, where *shang* has no lexical meaning any more. It is clear now that situation aspects are constructed on the basis of the structural features of verb phrases.

In addition to the above two types of aspect, notions like inchoative, inceptive, egressive, progressive, habitual, and completive etc are inevitably mentioned in the discussion of aspect (Vendler 1967, Smith 1991, Xiao and McEnery 2004). Interestingly enough, Smith (1991) and Xiao and McEnery (2004) propose two different understandings regarding the relation between the above notions and situation aspect and viewpoint aspect. Smith (1991:35) assumes that "the classification of inchoative, inceptive and egressive is orthogonal to that of situation types; moreover, they refer to

changes of state, all of the categories mentioned are telic. They are instances of Accomplishment or Achievement situation type". In contrast, Xiao and McEnery (2004:23-31) treat these notions as instances of viewpoint aspect. In particular, under the label of imperfective, it includes notions like inceptive/ingressive, durative, progressive, terminative/egressive, habitual, perfect etc.

The above two proposals expose the same problem that the notions of ingressive, inchoative, egressive, progress, completive are not granted with independent status and they are only treated as instances or a subcategory of either viewpoint aspect or situation aspect. Their divergence also shows the ambiguity about the hierarchical relations of different types of aspects. Nevertheless, in this thesis, these notions are treated as a separate level with autonomy that is parallel with situation aspect and viewpoint aspect. I term the notions of inchoative, ingressive, continuative etc as meta-aspects, which refer to the temporal features of an event at different stages.

Situation aspects cover distinctions, such as telicity, dynamicity, durativity, between properties of event-types denoted by verbal expressions, which linguists have tried to capture by classifying verbs into verb classes (Rothstein 2004). Since language is the symbolic system to represent the reality and depict the happenings, "situation aspect" refers to the "situation" reconstructed by language and the "aspect" embodied in language. In other words, it deals with the aspects encoded and reconstructed by language. Though the same happening in reality is the basic template of situation types, different languages adopt different parameters to represent the eventuality. Moreover, the same happening can be encoded as different situation types in different languages. Hence the situation aspect is not merely language-encoded but language-dependent and language-constrained.

Smith (1991) regards viewpoint aspects as speaker's different choice of temporal perspectives to present a situation either as a whole or only to focus on a portion of its internal constituency. It is at the personal cognitive level. "The speaker, by choosing appropriate focal 'settings' and structuring a scene in a specific manner, establishes a construal relationship between himself and the scene so structured" (Langacker 1987:128). Therefore, viewpoint aspect is the perspective adopted by the speaker and it is constrained by both the reality and people's cognition (construe). It is not "language universal" as claimed by Smith (1991), but it is cognition universal.

In reality happenings usually unfold at different stages along the temporal axle and meta-aspects I termed refer to some stage-based temporal features of an event. In particular, a happening may be about to happen, be in progress, be in completion, be a habit, be a process of repetition, and correspondingly its meta-aspects may be ingressive, progressive, completive, habitual, iterative etc. Definitely, these temporal features are encoded by languages, but they are usually constructed and represented less saliently compared with tense and viewpoint aspect. That is one of the reasons why they are paid less attention and deprived of autonomy in the study of aspect. As a matter fact, meta-aspect is a more direct mapping of different temporal features of the happening in reality. It is with less influence of people's conceptualization or that of language. In other words, it is more reality-constrained than language-constrained or cognition-constrained. Different languages may employ different strategies and parameters to represent the meta-aspects of a happening, but they should be universally found in different languages, because every type of meta-aspect refers to a certain episode of an actual happening, which is happening or happens or happened around us.

This three-level aspect system is represented below.

Situation aspects > Viewpoint aspects > Meta-aspects

| | |

Language-constrained > Cognition-constrained > Reality-constrained

Figure. 6 Three-level of aspect system

In the following part, a thorough investigation of the aspect realization in V-*shang* will be conducted, especially the viewpoint aspect and meta-aspect, from which we will learn how *shang* denotes its grammatical meanings in different environments.

4.2 The traditional aspect treatment of V-*shang*

Following Chao (1968), Smith (1991:371) recognizes three types of RVC: completive or phase, result state, and directional. She (ibid: 353) also argues that these three classes of RVCs all contribute to the perfective viewpoint of a sentence. Xiao and McEnery (2004: 159-171) makes a similar claim that an RVC functions to perfectivise situations, irrespective of the RVC types; RVCs are featured with completiveness, holisticity and dynamicity. Consider the following examples provided by Smith (1991: 354-5).

41. a. wo xue-hui-le   fawen

      I   learn-RVC-LE   French

      I learned French.

  b. Zhangsan la-kai-le   nei ge damen

      Zhangsan pull-open-LE   that LC gate

      Zhangsan pulled the main gate open.

c. Niao fei-*shang*-qu-le

bird   fly-ascend-RVC-LE

The bird flew up.

In 41. a is completive, b is result state and c is directional, they are interpreted as the follows.

42. a. Completive or phase RVCs affirm termination or completion, sometimes with additional emphasis or other information;

 b. Result RVCs change the lexical span of a verb constellation by specifying a result state.

 c. Directional RVCs add lexical information, sometimes lengthening the span of a constellation. (ibid: 354-355)

Previous studies like Smith (1991) and Xiao and McEnery (2004), treat V-directional as a subtype of RVC. This classification has been proven unsuitable and inaccurate with sufficient evidences in Chapter 2 and 3. We have shown that V-directional has multi-faceted meanings, including directional and grammatical as well as resultative meanings. Secondly, though it is a widely accepted viewpoint that construction like V1-V2, has perfective aspectual meaning, this assumption is not applicable to all V1-V2 constructions. One of the examples is V-directional like V-qilai, as in 43.

43. Yazhou de   jinji   manman   hao qilai   le.

Asia   DE economy slowly   good getup ASP

The Asian economy gets to recover slowly.

It is self-evident that the preceding verb *hao* "good" is a stative verb and that directional *qilai* "get up" shows inchoative meaning. The combination of *hao-qilai* "start

to become better" has no final point at all and is atelic. It has the explicit imperfective meaning of "starting to do something", so it is implausible to recognize it with perfective meaning.

I want to emphasize that though in most cases, V1-V2 has the constructional meaning of achieving or completing something and is perfective, the specific meaning of V2 may sometimes affect the situation type and viewpoint aspect. In this chapter, I will challenge the above criticized over-generalization and make the claim that V-directionals like V-*shang* does not show completion nor express perfective meaning in all cases. The reason is that the meaning of *shang* has semantic competition and semantic confusion with V1, which change stereotypes of the event structure and aspectual meaning of V1-V2.

4.3 The aspect realization of independent verb *shang*

Chinese has no inflectional marker to indicate tenses, so it is regarded as a language without tense. In order to express time reference, temporal adjuncts, aspect markers and aspectualizers all take their parts. For example, when motion verb *shang* is used as an independent verb, it only lexicalizes a generic kind of activity and it does not express any aspectual meanings by itself. It usually relies on the grammatical markers, such as *le* (perfective), *guo* (perfect), or other aspectualizers, such as *kaishi* "begin", *yijing* "already" to express certain kinds of aspectual meaning.

44. * a. wo *shang* lou

    I   up   floor.

    I go upstairs.

b. wo *shang* le   lou.

   I up   ASP floor

   I have come to the upstairs.

c. wo yijing   *shang* lou .

   I   already   up   floor

   I have been upstairs already.

44. a is the generic use of verb and it does not entail any specification of time reference. Without context, it is difficult to locate the temporal reference in this kind of expression; it is similar to the expression of "to do something" in English. The possible context use of 44.a is in a conversation, "where are you going?" "I go upstairs." In 44 b and c, aspectual marker *le* and aspectualizer *yijing* "already" are used with the predicate of *shang* respectively. *Le* is recognized as a perfective marker in Chinese (e.g. Chao 1968:246; Li & Thompson 1981:185), and *yijing* "already" is an aspectualizer indicating completion of an action. With these two devices, both 42 b and c indicate completive meta-aspect and perfective viewpoint aspect.

There are two types of *le* in Chinese—post-verbal *le* and sentence--final *le*, as shown in 46.a and b respectively. They are different not only in their syntactic positions, but also in their semantic features. Their similarities and differences have been discussed in a wealth of works (Chao 1968, Li & Thompson 1981, Zhang 1995).

In brief, post-verbal *le* has only one aspectual meaning—perfective, and specifically it implies the termination or completion of activity (c.f. Zhang 2005). Sentence final *le* features the following four properties (ibid).

45. a. it presents the completed action as of the present.

b. it is a change of state from not being to that of being.

c. it indicates change of quality or condition

d. it expresses commands.

Consider the following example—the combining of motion verb *shang* and *le*.

46. a. Yeye　*shang* le　　shan.

　　 Grandpa　up　　ASP　mountain

　　 Grandpa has been on the mountain.

b. Yeye　*shang* shan　　　le.

　　 Grandpa up　　mountain　ASP

　　 Grandpa has gone to mountain.　 /　 Grandpa has been on the mountain.

46. a shows that the motion has terminated and the agent arrives at the destination, so it is perfective. In the case of 46. b, it has two interpretations at least. As Zhang summarizes above, sentence-final *le* either presents "the completed action" or "a change of state from not being to that of being". Correspondingly, 46.b can express either that Grandpa moves or that Grandpa has moved to the destination. They can be situated in the following two contexts. (1) *Yeye shang shan le, guji ban ge xiaoshi hou dao shanyao.* "Grandpa has gone to the mountain, and he might climb to the mountainside." (2) *Yeye shang shan le, zhenzai shanshang ganhuo ne.* "Grandma has been on the mountain, and he is working there." Till now it is clear that sentence-final *le* expresses not only perfective meaning but also imperfective meaning.

The conclusion I draw here is that *shang* as independent verb is open for aspectual interpretations: it usually relies aspectual markers to represent aspects, and *le* is the most

frequently aspectual marker for *shang* and meanwhile post-verbal *le* and post-sentential *le* show some differences about their aspectual meanings.

4.4 The aspectual meanings of V-*shang*

Chapter 2 and 3 have shown that there are three distinctive but related types of V-*shang* construction, among which the semantic features and syntactic status of *shang* exhibit differences. Meanwhile, different aspectual meanings are found in different types of V-*shang* construction; in particular, due to unbalanced and changing status of V and *shang* in these three types of V-*shang*, their aspectual meanings are denoted by different elements within V-*shang*, either by *shang* or by V-*shang* or even by external aspect marker, like *le*.

4.4.1 Type 1. V-*shang* as Motion event with perfective viewpoint aspect

The differences between the post-verbal le and sentence-final le do not come out in the first type of V-*shang* construction as in the case of *shang* as independent verb.

    47. a. Tamen pa   *shang* le   chang cheng.

          They   climb up   ASP long wall

          They climbed onto the Great Wall.

      b. Tamen pa   *shang* chang cheng le.

          They   climb up   long   wall   ASP

          They climbed onto the Great Wall.

48. a. feiji sheng   *shang* le   tian.

Plane ascend   up   ASP   sky

The plane flew upto the sky.

   b. feiji sheng *shang* tian   le.

Plane ascend up   sky   ASP

The plane flew upto the sky.

We find that in a and b in 47 and 48, both postverbal *le* and sentence-final *le* express the perfective meaning, in other words, here the sentence-final *le* does not express impressive meaning any longer. Now I will explain the reason why postverbal and sentence-final *le* denotes the common aspectual meaning in V-*shang*.

In the first type of V-*shang*, we have demonstrated that V represents the manner of motion and *shang* represents the core event of Motion event, which is composed of two temporal sections—movement and locatedness. Temporally, the movement of *shang* entails departure as the initiating point of movement, and the locatedness entails the destination as the final ending point of movement. In terms of meta-aspect, it is terminative, since it focuses on the final endpoint of the motion or the termination of the motion. In terms of viewpoint aspect, *shang* presents the situation as a whole, so it is perfective. *Shang* embodies a telic event with initial and final points of the situation, which meets up to the requirement of the general schema of perfective.

<div align="center">

I   F

/////////

Movement … locatedness

</div>

It is fairly clear that the semantics and schema of *shang* makes it eligible to express perfective meaning of V-*shang*. This kind of aspectual meaning endowed by *shang* is

represented within the construction itself, while aspectual marker *le* is an external device to show aspectual meaning, which is realized at an external level. Since V-*shang* can express perfective temporal reference and aspectual meaning by itself, the imperfective interpretation of sentence-final *le* is constrained and shadowed by the perfective aspectual meaning from the V-*shang* construction. The internal aspectual meaning can be regarded as the constructional meaning of V-*shang*, which is impossible to be observed when *shang* is an independent verb as in 4.3.

In sum, in the first type of V-*shang*, it has perfective viewpoint aspect, which is endowed by the semantics of *shang*. It presents a closed/telic situation with explicit I and F. The first type of V-*shang* has the meta-aspect of terminative to show the termination of motion.

4.4.2 Type 2. V-*shang* as resultative with perfective viewpoint aspect

As proposed in 3.3.2, the second type of V-*shang* is a typical instance of RVC, where the internal relation of V and *shang* is constrained by the temporal sequence of the subevents lexicalized by V and *shang*. I also define RVC construction in Chinese as external causative, which implies a causer-caused relation through the change-of-state of the medium. And its situation aspect is Accomplishment.

V lexicalizes the so-called "Causer", which initiates the action and has the direct control over the state of object. V is usually recognized as the primary predicate and entails the initial point of the complex event. *Shang* lexicalizes the so-called "Caused" or "Causee" in the causative chain and entails the final ending point of the activity. Temporally, *shang* follows the subevent lexicalized by V; semantically, it denotes the

resultant state of the object caused by V; syntactically, it functions as the complement to V. This analysis tells us that V-*shang* with resultative meaning presents the situation as a whole and it is a closed event and it instantiates the general schema of perfective with explicit I and F.

However, two potential interpretations can be induced from V-*shang*. It is better to treat them at the level of meta-aspect. Firstly, *shang* imposes a bound to activity, which makes an atelic event into telic and makes the event of Activity into Accomplishment; in other words, it conceptualizes the completion of an activity. Besides, given the fact that the locatedness schema of *shang* is mapped onto V-*shang*, *shang* is also characterized by semantic feature of [+durative], expressing the duration of the resultant state. Therefore, there are two types of meta-aspect presented here—completive and durative, which embodies two sequential sections of an event.

These two levels of representation can be illustrated as follows.

<div align="center">

Cognition: Perfective

I   ////////   F ……

Reality: Completive Durative

</div>

Concerning the viewpoint aspect of V-*shang*, as I claimed at the very beginning of this chapter, it is a cognitive and subjunctive process and it depends on the speaker's own perspective of viewing the situation. It is perfective when the speaker adopts the perspective of viewing the situation of starting with V and ending with *shang*, which means the durative or stative situation is not salient to the people's conceptualization, and it is not selected into the cognition domain. In terms of meta-aspect, it can represent both

these two aspects endowed by V-*shang* —completive and durative, because this level is a direct mapping of the happening in reality.

49. a. Xiao wang chuan *shang* le xizhuang.

    Little Wang wear up ASP suit

    Xiaowang put on the suit.

  b. Xiao wang zai wu fengzhong nei chuan *shang* le xizhuang .

    Little wang at five minute in wear up ASP suit

    Xiaowang put on the suit within 5 minutes.

  c. Xiao wang chuan *shang* xizhuang ban ge yue le.

    Little wang wear up suit half CL month ASP

    Xiaowang has worn suit for half a month.

49. a lexicalizes two different types of situation in reality, one is that Xiaowang finishes the process of "putting on suit within some time" as in 49.b, the alternative expresses a kind of state that "Xiaowang has worn the suit for sometime" as in 49.c. The former makes a resultative interpretation, conceptualizing a closed situation and presenting the situation type as Accomplishment with an external causer-caused chain. Here *shang* can be modified with "within 5 minutes", so *shang* can indicate a telic event and represent the perfective aspect. 49.c can be modified with "for half a month", which provides a durative interpretation, which emphasizes the persistence of the resultant state caused by V, which express imperfective meaning. The meanings expressed by 49.b and c are two possible scenarios in reality, which correspond to the meta-aspects of completive and durative.

As for the question why at this stage, RVCs like V-*shang* usually presents perfective viewpoint aspect, or why 49.b is more prototypical than 49. c as the interpretation of 49. a, it depends heavily on the people's cognition and context of situation. It is unanimously agreed in the field of cognitive science that dynamic objects are more salient to people's attention than stative objects. This visual cognition rule is also applicable for the fact that dynamic process will be given more salience than state. When people structure a complex situation, the dynamic process is more apt to be selected into people's cognition domain to construe a dynamic event, either perfective or imperfective. State like 49c is also conceptualized and construed when people want to convey narrative or other pragmatic meanings. For example, when someone asks "*jintian Xiaowang chuan shenmen yifu shangban?*" (What clothes did Xiaowang wear when he went to work today?) ", the stative interpretation 49. c is more appropriate. The following example shows two more examples of V-*shang* showing the meta-aspect of durative.

50. a. qiang *shang* gua   *shang* le   chuanlian.

         Wall   on   hang up   ASP curtain

          The curtain is hanging on the wall.

      b. wo zai fengmian xie   *shang* le   mingzi.

          I   at   cover   write   up   ASP name

          I wrote my name on the cover.

The main point I am arguing in this part is that the second type of V-*shang*, it generally has the perfective viewpoint aspect to express the completion of activity due to some cognition factors, such as salience and iconicity rule. In other words, this level of expression is not the whole picture of the happening in reality, because it has already

been selected and re-organized during the cognition process. Under the influence of the pragmatic factors, such as topic and focus, V-*shang* can also express the durative meaning which is not selected and included in the construe of perfective aspect. So it is clear now that the aspect of perfective and that of completive and durative are presented at two different levels, the former is more at the cognition level and it relies on the people's choice of perspective, whether to treat the situation as a whole or only to present a portion of the situation; the latter is at the reality level or is a direct mapping of the reality, which means that it is a mirror to show how the happening unfolds in reality, whether it is happening or it has finished, or it is repeated again and again. Based on this distinction, we learn that perfective meaning expressed by RVC in Mandarin is a conceptual and subjunctive thing. With regard to the specific aspectual meanings encoded in different examples, it is a more detailed and complex picture and it is more appropriate to handle it at a separate level of meta-aspect.

4.4.3 Type 3. V-shang relying on aspect marker to express perfective meaning

From the previous analysis, we learn that in the third type of V-*shang*, *shang* has lost its verbal features via grammaticalization and it cannot take on any argument nor represent a separate subevent in terms of event structure. With the bleaching of its lexical meaning, its grammatical meaning and status are strengthened. In particular, motion verb *shang* maps its spatial structure or schema onto abstract domains of temporal/aspect. Based on the spatial cognition, there is isomorphism between the lexical meaning of *shang*—spatial verb and its grammatical meaning—aspect. For instance, "the meanings of "movement into", "position in", or "movement out of" correspond to the meanings of ingressive,

continuative/iterative, and egressive aspects" (Brinton 1988:114), so motion verb like *shang*, is one of the ideal candidates to act as grammatical marker to represent the aspectual meanings.

Now some examples are provided to show how *shang* acts as a grammatical marker to show different types of aspects in V-*shang* construction.

51. a. wo ai *shang* le   ta.

  I love up   ASP her/him.

  I fall in love with her/him

 b. wo   ai   ta

  I   love her/him

  I love her/him.

 *c. wo ai *shang* ta

  I love up her/him

  I fall in love with her

52. a. ta   lian   *shang* le   taiji.

  He practice up   ASP taiji

  He takes to practicing taiji.

 b. ta   lian   le   taiji.

  He   practice ASP taiji

  He practiced taiji.

 *c. ta lian   *shang* taiji

  He practice up   taiji

  He takes to practicing taiji.

53. a. tamen liang   you   cao   *shang* le.

    They plural again quarrel up   ASP

    They begin to quarrel again.

   b. tamen liang   you   cao   le.

    They plural again quarrel   ASP

    They quarreled again.

  *c. tamen liang   you   cao   *shang*

    they plural   again quarrel up

    They begin to quarrel again.

We know that the first and second types of V-*shang* have the perfective viewpoint, which stems from V-*shang* construction itself. In particular, the semantic features of [+locatedness] of *shang* acts as an ending point to delimit an atelic event that is lexicalized by [+movement] of *shang* or V. In another word, *shang* is able to perfectivise event within its lexical semantic elements. My explanation that these two types of V-*shang* have internal meaning of aspect from verbal *shang* are in accordance with the pervasive claim that V-V compound is perfective in itself [2] (Li and Thompson 1981, Smith 1991). In the third type of V-*shang*, *shang* is grammaticalized and it does not retain any verbal meaning, so here *shang* is deprived of the ability of perfectivizing event. It means that the third type of *shang* cannot denote perfective aspect by the construction itself, so V-*shang* has to rely on external aspect markers like *le* to denote perfective meaning. That is the reason why *le* in a of 51, 52 and 53 is compulsory to express the

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[2] Prof. Bao Zhiming has reminded me many times to make a distinction between V-*shang* and V-V compound. But I stubbornly ignored his suggestion. Now I realize it is quite necessary to make a reference to this point to make readers have a clear idea about the notion of internal and external aspects. I would like to think his constant reminders.

perfective aspectual meaning of V-*shang*; and c in 51, 52 and 53 without external aspect marker are not acceptable. In other words, the third type of perfective aspect is external.

In a of 51, 52 and 53 represents the change-of-state from not being to that of being. For example, 51.a can be interpreted as "I did not like her/him, but now I fall in love with her/him". 52.a is interpreted as "He did not practice taiji, but now he takes to practicing taiji". The viewpoint of the third type of V-*shang* is perfective, because aspect marker *le* can express "the change of state of not being to that of being" (Zhang 1995). In particular, *le* makes possible an instantaneous change of the ending of an old state and the beginning of a new state, which embodies a special kind of perfective aspect schema that the internal structure is not explicitly represented, as illustrated below.

I/F

Marked perfective aspect schema

The above schema is applicable to 54. Here a, b and c also represent the change of state from not being to that of being. For example, 54.a is interpreted as "My state is changed from not obtaining the book to obtaining the book". 54.c is interpreted as "Their life changes from bad to good." This type of change-of-state emphasizes the realization of something, while 51, 52 and 53 emphasize the entry of a new state. But in terms of viewpoint aspect, both of them are perfective due to the instantaneous change of state in terms of viewpoint aspect, which is realized by *le* at an external level beyond V-*shang* construction.

54. a. wo zhongyu mai *shang* na ben   shu   le.

    I   finally   buy   up   that CL.   book   ASP

    I finally bought that book.

b. jiehun yi nian hou ta bao *shang* le erzi.

   Marry one year after he hug up   ASP son.

   One year after marriage, he has got a son.

c. tamen guo *shang* le   xinfu de shenghuo.

   They live up   ASP   happy DE life

   They have lived a happy life.

As mentioned before, *shang* is able to modify the internal temporal structure of the event lexicalized by V. In b of 51, 52 and 53, V describes an event that has happened. With the modification of *shang*, the happened event is lengthened into another time span and the whole event is changed. Compared with b in 51, 52 and 53, the new event of a in 51, 52 and 53 includes the ending of an old state and the inchoation of a new state. Correspondingly, there are two meta-aspects within its event—egressive (the ending of an old state) and inchoative (the starting of a new state). Though the viewpoint aspect is perfective, the inchoative meta-aspect is more salient in these examples, because the metaphor "up is to appear" is better situated in such contexts. The implied meanings of a in 51, 52 and 53 are interpreted as "I begin to love her/her", "I begin to practice taiji as a habit", "They begin to quarrel again". The relation between viewpoint aspect and meta-aspect in these examples can be illustrated below.

Viewpoint Aspect: Perfective

I/F …

Meta-aspect: egressive inchoative

The above schema is also applicable to 54, but examples of 54 are more salient in the meaning of success in doing something or achieving something rather than the inchoation

of a new state. The reason is that the metaphor of "up is positive (successful)" is better situated in the context of these examples. It emphasizes the meaning of realization of something, so the meta-aspect of egressive is more saliently presented.

In addition to perfective meaning endowed from *le* in the above two different uses of V-*shang*, 55 illustrates one more means of perfectivising event.

55. a. ta he *shang* ji   bei *ba*i jiu jiu zui le

    he drink up   several CL white wine then drunk ASP

    After taking a few glasses of alcohol he became drunk.

  b. kan *shang* san   wu yan

    look up   three five eye

    look at it for several times

The common point of a and b in 55 is that the whole event is composed of a series of a single repeated event. *Shang* here expresses iterative meta-aspect. The base of iterative is a semelfactive event and iterative is realized through repetition of the semelfactive event. In our examples, the repetition is expressed by the numeric adjuncts, like *ji bei* (several glasses), *ji ci* (several times), which expresses the quantification of event. *Shang* shows the successive or seriative process. In another word, *shang* makes a semelfactive event to proliferate and the numeric adjuncts impose an external ending point to the event. *Shang* and numeric adjuncts contribute to a telic and closed event. They are perfective in nature.

It seems contradictory that the event type of this type of V-*shang* is State but it has perfective viewpoint aspect meanwhile. In fact, this "inconsistency" reveals the nature of the third type of V-*shang*. Here, *shang* is grammaticalized and cannot perfectivize the event. Aspect marker *le* is able to "change the state from not being to that of being"

(Zhang 1995) and it undertakes the role of perfectivizing the event. So the perfective aspect operates at an external level beyond V-*shang* construction. Event structure "operates at the lexical level" and accounts for "the temporal meanings arising from arguments and non-arguments" (Vendler 1967, Smith 1991). The conclusion that the third type of V-*shang* is State operates with V-*shang* construction and it excludes the influences of aspect markers *le*.

In sum, the third type of V-*shang* is State in terms of even types and it is perfective in terms of viewpoint aspect, but it is realized through two different means—one through aspect marker *le* and the other through the quantification of numerical adjuncts; in terms of meta-aspect, it has the aspect of egressive and inchoative, or iterative, which well reflect different temporal features of real scenarios.

4.5 Summary

My analysis here greatly expands the traditional discussion of the aspectual meaning of V-directional construction. Firstly, we have shown that there are some subtle differences of the aspectual meaning of different types of V-*shang*, especially the meta-aspect. Secondly, the aspectual meanings of V-*shang* are denoted and realized by different elements in different types of V-*shang*.

(1) Type 1: the perfective aspect is mainly denoted by *shang* based on its two-stage spatial image;

(2) Type 2: the aspect of perfective is realized through the delimiting function of the caused event within the Causer-Caused chain;

(3) Type3: perfective is realized through aspect marker *le* and through the quantification of numerical adjuncts;

In addition, I propose a three-level aspectual system. I argue that viewpoint aspects, like perfective and imperfective, are represented at the cognitive level and they reconstruct the temporal structure in real scenarios through cognitive selection and construes. Meta-aspect acts as a mirror to reflect the internal temporal structure of happening in the reality to the greatest extent. As for situation aspect, it is reconstructed the aspectual meaning by means of language. Thus we get a richer and more diversified and comprehensive system of aspect. The whole picture of aspect meanings of V-*shang* is presented as in the following figure.

	Situation aspect	Viewpoint aspect	Meta-aspect
Type 1	Achievement	Perfective	Terminative
Type 2	Accomplishment	Perfective	Completive/Durative
Typee 3	State	Perfective	Egressive/Inchoative /Iterative

Figure. 7 Three-level aspect system of V-*shang*

CHAPTER 5 GENERAL CONCLUSION

5.1 Concluding remarks

This thesis examines V-*shang* construction from four different perspectives—the semantic network of *shang*, the event structure, as well as the viewpoint aspect and meta-aspect of V-*shang*. It provides us with a comprehensive understanding of V-directional construction. Let me now pull together some of the important findings presented in this thesis. These include:

(i)   *Shang* demonstrates many distinctive but related meanings in V-*shang* construction. These meanings are not independent but associated with each other via cognitive schemes like metonymy and metaphor; its prototypical meaning (spatial) and peripheral meanings (static spatial and non-spatial meanings) constitute the semantic network of *shang*.

(ii)   According to the semantic changes along the meaning extension route, three types of V-*shang* construction are found.

Type 1 *Shang* retains full lexical meaning and it represents a Motion event.

V (co-event) + *shang* (core-event)

Type 2 *Shang* retains the static spatial meaning and it shows the resultative state of a causing event.

V (core-event) + *shang* (co-event)

Type 3 *Shang* is grammaticalized and acts as a grammatical marker to show the temporal features of event lexicalized by V.

V (core-event) + *shang* (grammatical marker)

(iii)   Moreover, these three types of V-*shang* have different aspectual meanings.

	Situation aspect	Viewpoint aspect	Meta-aspect
Type 1	Achievement	Perfective	Terminative
Type 2	Accomplishment	Perfective	Completive/Durative
Type 3	State	Perfective	Egressive/Inchoative /Iterative

In sum, the analyses in this thesis pose great challenges to the traditional proposal in previous research that V-*shang* is a subtype of RVC, where V and *shang* has causative relations and that *shang* acts as complement to represent resultative meaning. We can only say that the traditional treatment of V-*shang* is over-generalized and does not see the whole picture of V-*shang* construction. We have demonstrated with sufficient semantic and syntactic evidences that V-directional as RVC is only one type of V-*shang*, which only accounts for 32% based on the corpus data.

5.2 An integrated model of V-shang

The above four perspectives are not regarded as four separate and parallel lines. They are interacting with each other. A coherent model that integrates these four aspects will be worked out — the interface of lexical semantics of *shang* and the morph-syntactic realization of V-*shang*.

The meanings of morphemes, words, and larger units have a dual representation of Conceptual Structure (CONC STR) and Grammatical Semantic Structure (SEM STR), in K.P. Mohanan and T. Mohanan's terms (1996, 1999). According to Mohanan &

Mohanan (1999), CONC STR is invisible to the principles governing phonological, morphological and syntactical representations, and only SEM STR is committed to the investigation of meanings tied up with the grammatical system of natural language.

Chapter 2 presents us the semantic network of *shang* in V-*shang*, but not all the semantic elements of *shang* bear the same importance and relevance in its semantic network. Only [+movement], [+path] and [+locatedness] are chosen as the prototypical meaning of *shang*, from which the peripheral meanings are derived. In other words, these three semantic elements are the core meanings of *shang* and the semantic network is organized around them.

Now the question is that "Are these three semantic features responsible for the morph-syntactic behaviors of V-*shang*, like its argument realization and aspectual meanings?" To put it in another way, are the semantic elements [+movement], [+path] and [+locatedness] represented at the level of SEM STR?

Any semantic distinction that affects argument realization is relevant to the design of a lexical semantic representation (B. Levin & H. Rappaport 2005). In the case of *shang*, [+movement] and [+locatedness] are the semantic elements that affect the argument realization of V-*shang*. [+movement] embodies the dynamic verbal features of *shang*, and [+locatedness] represents some static meanings. [+movement] makes *shang* possible to bear the thematic-roles of Agent and Theme, and [+locatedness] makes *shang* bear the thematic-role of Location.

Type 1. *Shang* retains full lexical meanings of [+movement] and [+locatedness].

Shang acts as a full predicate and lexicalizes a self-propelled motion that the Agent changes his/her state (place) rather than other objects. *Shang* is able to bear all the

thematic roles. In particular, *Shang* assigns Agent and Theme to one NP argument and Location to another NP argument.

Type 2. *Shang* retains the semantic element of [+locatedness].

The role of Agent, Theme and Location are assigned to three different NP arguments. Due to the partial retaining of [+locatedness], *shang* is only responsible for the assignment of Location and V assigns two different NP arguments the role of Agent and Theme. V-*shang* lexicalizes an externally caused event that Agent directly has effects on Theme.

Type 3. *Shang* retains no lexical meaning.

Now that the lexical meaning of *shang* is bleached, only V rather than *shang* is eligible to take on any argument or assign any thematic-roles.

Now we see one instance of interface of semantics and syntax. The lexical semantics of *shang* is a crucial factor for its argument realization in V-*shang*. During the process of meaning extension and mapping, the prototypical meanings of *shang* are partially retained and correspondingly V-*shang* shows different types of thematic-role assignment and argument realization.

Another type of interface of semantics and syntax is about the aspectual meaning of V-*shang*. From chapter 4, we learn that the first and second types of V-*shang* have perfective viewpoint aspect, which is endowed from the V-*shang* construction, and meanwhile the perfective aspect marker *le* is not necessarily. In the first type of V-*shang*, the semantic element of [+locatedness] is regarded as the ending point to delimit the [+movement], and the closed reading or perfective meaning is contributed by the two-state schema of *shang*. In the second type of V-*shang*, V initiates the action and *shang*

shows the result of the action, where V entails the initial point (I) and *shang* entails the final ending point (F), so V and *shang* contribute the perfective meaning and instantiate the general schema of perfective aspect.

Shang not only endows viewpoint aspects but also expresses meta-aspects. The core lexical meaning of *shang* is the movement along an upward spatial axle, but this movement simultaneously undergoes along the temporal axle. Therefore, the spatial meaning is the ideal original domain to be mapped onto the target domain of temporal. In other words, there is isomorphism between the lexical meaning of *shang*—spatial verb and its grammatical meaning. For instance, "the meanings of 'movement into', 'position in', or 'movement out of' correspond to the meanings of ingressive, continuative/iterative, and egressive aspects" (Brinton 1988:114). The temporal features can be realized as aspect/tense, aspectualizer etc in language due to the degree of grammaticalization and the lexical semantic feature of lexeme itself. In the case of *shang* in V-*shang*, it is grammaticalized as a grammatical marker to show some aspectual meanings but into not a fully aspect marker as *le* (perfective), *zhe* (progressive), *guo* (perfect) in Chinese. Due to the duel-axle movement of *shang*, different stages of movement along the path lexicalized by *shang* can be regarded as different temporal sections of the event. That is why *shang* can be regarded as a grammatical marker to represent the internal temporal features of events.

Till now, we see clearly that there is indeed interface of lexical semantics of *shang* and syntax of V-*shang* construction and that it includes different types of interface, like argument realization, aspect realization etc. Combined with my proposal of three-level aspect system, the interface of semantics and syntax can be represented below.

Lexical semantics

(SEM STR)

Aspect system

situation aspect   viewpoint aspect   meta-aspect

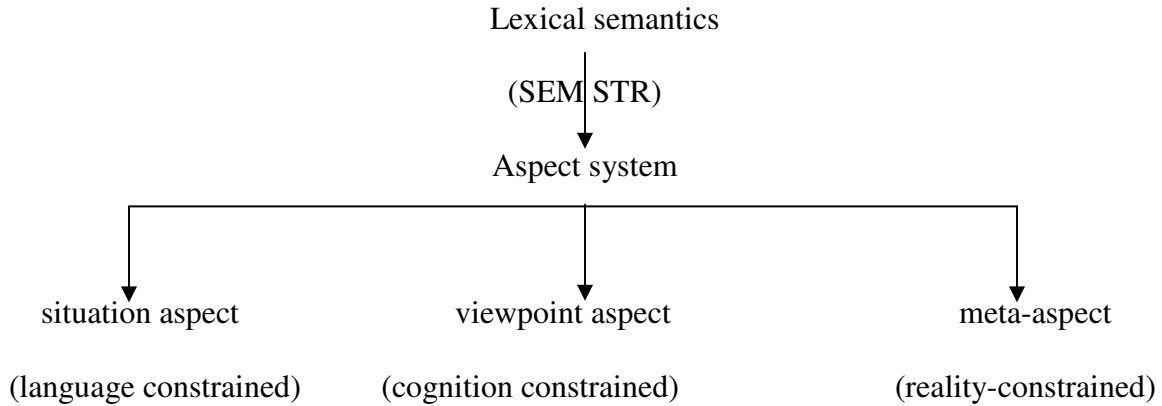(language constrained) (cognition constrained)   (reality-constrained)

Figure. 11 The interface between lexical semantics and aspect system

 There are eight basic directionals that can be used in V-directional construction in Mandarin, and this model is also applicable for these directionals, like *xia* "down", *jin* "in", *chu* "out" etc, due to their salient spatial structures, which means that these directionals undergo similar mapping from their lexical semantics to the grammatical system. But with regard to the specific grammatical meanings, they may exhibit some differences due to their unique image schemata and semantic features.

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