

A Cognitive Linguistic Approach to Mandarin Spatial Terms: The Case of *Shang* as a Verbal Complement

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Abstract

The present study investigates the semantics of *shang* as a verbal complement. Using authentic corpus data, we identify six core senses, with each having its own pattern of concept elaboration. The pattern of concept elaboration shows that the meaning of *shang* is determined by the verb that precedes *shang* and the noun phrases in the co-text. We in addition show that the six senses constitute a clear case of attenuation, with the conceptual content prompted by *shang* gradually fading away.

Keywords: Polysemy, complement, attenuation, conceptual autonomy/dependence

1. Background

The semantics of spatial terms is an issue that has received considerable attention in cognitive linguistics. In Mandarin, the verbal complement *shang*, one of the most extensively studied spatial terms, has presented a headache not only to learners but to linguists for its versatile semantic functions.

Previous studies have attacked the semantics of *shang* as a verbal complement from various stances, with each having made its own contribution (Chou 1999; Chung et. al 2006; Hsu 2001; Kim 2005; Li 1999; Su 1997; Su 1998). However, the issue of how the meaning of *shang* patterns with its co-text has not been fully addressed. The present study will take up this problem to investigate how the meaning of *shang* varies with its co-text.

In order to find out about how *shang* behaves in real usage events, we randomly extracted excerpts that contain *shang* as a verbal complement from the Sinica Balanced Corpus of Mandarin Chinese and manually looked into the database to generalize the semantic grouping of *shang*, based on the methodology of Principled Polysemy (Evans 2004; Tyler and Evans 2003).

2. Analysis: Pattern of concept elaboration

With the above proposed method and approach, six meanings have been identified, including ‘vertically attained,’ ‘vertically higher,’ ‘forward,’ ‘attached,’ ‘completive,’ and ‘inceptive.’ The semantic clusters are illustrated below.

We claim that the first and the prototypical sense is ‘vertically attained,’ which describes both the vertical motion of a primary figure and the resultant state of that

figure arriving at a concrete surface. This sense is defined by a verb of vertical elevation that involves effort, such as *deng* ‘mount,’ *pa* ‘climb,’ etc., and a noun phrase associated with a (near-)horizontal SURFACE, on which the primary figure can rest. A typical example is (1) below.

- | | | | | | |
|-----|----------------|------|-------------|-----------|----|
| (1) | daihui | wo | pa-shang | wu-ding | qu |
| | later | I | climb-SHANG | house-top | go |
| | chan-yi-chan | xue | | | |
| | shovel-ASP-RED | snow | | | |

“Later, I’ll climb onto the roof to shovel the snow.”

As can be seen here, these two examples do exemplify a distinct pattern of concept elaboration for ‘vertically attained.’ In (1), the tr, *wo* ‘I,’ follows a trajectory in space with effort by means of climbing, which is linguistically elaborated by the verb *pa*, and finally vertically attains the specific and concrete GOAL, which is coded by *wu-ding* ‘roof.’ Here, the noun phrase, *wu-ding*, prompts a SURFACE, which supports the tr and allows the tr to stay firmly on it. Hence, we are now able to identify the distinct pattern of grammatical profile and concept elaboration for ‘vertically attained.’ In this usage cluster, *shang* is structurally preceded by a verb and is followed by a noun phrase that specifies the GOAL of the verbal process. Furthermore, the pattern of concept elaboration for ‘vertically attained’ includes a verb of vertical elevation that involves effort and profiles the ascending PATH and a noun phrase associated with the concept of SURFACE as the GOAL of the trajectory.

The second semantic cluster is ‘vertically higher,’ which portrays the vertical elevation of a primary figure as the most important element in the conceptual scene. This meaning is characterized by a verb of vertical elevation that involves relatively less physical effort than those in ‘vertically attained,’ such as *fei* ‘fly,’ *fu* ‘float,’ etc., and a generic noun phrase that follows in the co-text. The usage cluster can be instantiated by (2) below.

- | | | | | | |
|-----|-----------------------------|-----------------|---------|------|------|
| (2) | pao | ge | ji | bu, | jiu |
| | run | CL | several | step | then |
| | lian-ren-dai-san, | qing-piao-piao | di | | |
| | with-person-bring-parachute | light-float-RED | ADV | | |

fu- shang	tiankong
float-SHANG	sky

“(He) ran just for several steps, and then floated up to the sky along with his parachute.”

For the usage of ‘vertically higher,’ we observe that this meaning occurs within the constructional schema of [NP1] – [V] – [SHANG] – [NP2]. The concept elaboration of ‘vertically higher’ is first of all dependent on verbs of vertical elevation that profile only the upward PATH or the manner of vertical elevation, with a typical example of the former group being *sheng-shang* ‘rise-SHANG’ and two instances of the latter group being *fu-shang* ‘float-SHANG’ and *fei-shang* ‘fly-SHANG.’¹

In addition to the distinct PATH-profiling property of the verb as the autonomous predication in [V] – [SHANG], note that the slot of NP2 is always elaborated by a rather general location like *tian* or *tiankong* ‘sky,’ toward which the tr, instantiated by NP1, is directed. The vague and general nature of the GOAL is important for a usage event that involves [NP1] – [V] – [SHANG] – [NP2] to be analyzed as an instantiation of ‘vertically higher.’ If the usage event includes a concrete GOAL that involves a SURFACE, as in *fei-shang zhitou* ‘fly-SHANG tree branch,’ then the usage develops an additional meaning and should be analyzed as an instantiation of ‘vertically attained.’²

Another semantic cluster of *shang* extended from ‘vertically higher’ is ‘forward,’ encoding the non-vertical motion of a primary figure in the scene. This sense is accompanied by a verb of non-vertical motion in the co-text, such as *yong* ‘rush toward,’ *gan* ‘hurry,’ etc. (3) below is typical of this meaning.

(3)	ganyuan	fajue	guochangrong	zhunbei...	
	agent	find	Guo Changrong	prepare	
	taoyi,	liji	yong- shang	daibu	guo
	escape	immediately	surround-SHANG	arrest	Guo

¹ In addition to [V] – [SHANG], this sense is also instantiated in other constructional schemas such as [SHANG] – [V]. Typical examples are *shang-sheng* ‘SHANG-rise,’ *shang-fu* ‘SHANG-float,’ etc.

² The two instances of *fei-shang* discussed here, according to Lakoff’s (1987) fine-grained image-schematic analysis, would also have to be listed as two separate usages. However, the actual reason we choose to classify these two instances into different semantic categories is based on their different “conceptual archetypes” (Langacker 1999, 2006, 2008), which we will elaborate on in a later study.

xian
suspect

“(When) the agents found that Guo Changrong was about to... escape,
(they) immediately rushed to surround and arrest the suspect, Mr. Guo.”

For the above example, the PATH and an onstage vantage point, which coincides with the tr, are both in profile. In (3), the tr’s, *ganyuan* ‘agent,’ travel along a PATH in the conceptual domain of SPACE, which is coded by the verb *yong* ‘to rush (in a collective fashion) toward.’³ The verb itself does not prompt a vertical PATH, and instead, the direction of the PATH is construed from the perspective of an onstage vantage point that coincides with the tr, since the GOAL of motion is in the perceptually salient region, or in front of, the tr. Therefore, for this particular instance, the PATH and the onstage conceptualizer are both conceptually prominent.

The fourth usage cluster that we have identified is ‘attached,’ which portrays the resultant state of a figure being attached to a surface. This meaning can be distinguished by a verb of applying substance to a surface, such as *shua* ‘brush,’ *tie* ‘post,’ and *xie* ‘write,’ and a noun phrase associated with SURFACE in the co-text. (4) is a typical instance.

- | | | | | | | |
|-----|----------|------|-----|--------------------|----------|----|
| (4) | fangwu | wai, | dou | shua- shang | bu-tong | de |
| | house | out | all | brush-SHANG | NEG-same | DE |
| | yanse... | | | | | |
| | color | | | | | |

“(They) all painted (their) houses with different colors using brush...”

For this group of instantiations of [V] – [SHANG], our observation regarding the verb and the thematic role of the noun phrase also holds true. Conceptually dependent on this group of verbs of applying substance to a surface, *shang* highlights the resultant state of the verbal process, with the tr being attached to the lm that invokes a kind of SURFACE. In (4), the autonomous predication of *shua* ‘brush’ in *shua-shang* involves a human agent applying a brush to a SURFACE to produce a result on it. Here, the different colors, with the thematic role of a patient, are brought to being attached to the SURFACE, i.e. the outer walls of the houses. Note also that in the above example,

³ The primary figures in this instance, *ganyuan* ‘agent,’ are several conjoined entities that participate in the same process, which corresponds to what Langacker (1991:479) terms as “replicate trajectors.”

yanse ‘color’ in (4) is the thematic patient, which is acted upon and undergoes change by an agentive figure.

The fifth sense identified for *shang* is ‘completive,’ which depicts the final state of a primary figure being in contact with another entity, as a result of the verbal process. This sense is characterized by a verb that has the potential to invoke the notion of CONTACT, with the examples of *guan* ‘close,’ *cha* ‘plug,’ *lian* ‘connect,’ etc. (5) below is characteristic of this sense.

- | | | | | | | |
|-----|---------------|------|----------|--------------------|-----|----------|
| (5) | dang | men | kuaiyao | guan- shang | huo | zhengzai |
| | when | door | about to | close-SHANG | or | is being |
| | helong | | shi, | qianwan | bie | jinchu |
| | come together | | when | be sure | NEG | in-out |

“When the doors (of an elevator) are coming to a complete close or are in the middle of coming together, never walk in or out.”

The distinctive feature of (5) is the element of CONTACT as the resultant state of a verbal process. In comparison to *shang* meaning ‘attached,’ this usage cluster does not code a tr being attached to a prototypical SURFACE but merely highlights the final state of two entities being in contact with each other. In (5), *shang* in *men kuaiyao guan-shang* ‘door about to close-SHANG’ profiles the endpoint of the process of closing coded by the autonomous predication of *guan* in *guan-shang*, with the two doors of an elevator coming to proximity to each other. Note that the above instantiation is different from those of ‘attached,’ in the sense that instantiations of ‘completive’ serve only to bring to focus the endpoint of a process where two entities enter into contact, instead of coding an object being attached to a strictly defined SURFACE. In other words, whether the constructional schema of [NP1] – [V] – [SHANG] – [NP2] invokes a prototypical SURFACE constitutes the main difference between an instantiation of ‘attached’ and one of ‘completive.’ Therefore, we will argue that ‘completive’ is an attenuated version of ‘attached’ with the conceptual content of SURFACE having faded away, which we will get back to in our discussion.

The last sense that we have found in the corpus is ‘inceptive,’ which describes the beginning of a mental state. This kind of usage can be defined by a verb that has to do with mental contiguity, such as *ai* ‘love,’ *mi* ‘addict,’ etc, with (6) being a typical instance.

- (6) wanyi... wo ai-**shang** ni, na zeme
 should I love-SHANG you then how
- ban?
 do

“What if I fell in love with you, then what should (I) do?”

In this example, *shang* codes the inception of a state of being emotionally attracted, which is coded by its autonomous predication in the assembly of [V] – [SHANG], with the resultant state remaining existent after the inception. In particular, in (6), *shang* highlights the beginning of the state of the tr being emotionally attached, which is elaborated by the verb *ai* ‘love.’ After the inception of that particular state, the state of being in love lasts. Note especially that, the verb must relate to some kind of contiguity between two entities in an abstract sense. Specifically, the autonomous predications relative to *shang*, i.e. *ai* ‘love’ and *mi* ‘addict,’ etc., are both associated with the notion of contiguity between an experiencer and another entity, though not in a concrete conceptual domain. In contrast, a mental verb that does not invoke the concept of contiguity, such as *hen* ‘hate’ or *taoyan* ‘dislike,’ would create anomaly if combined with *shang*. With the above contrast, mental contiguity can be justified to characterize the usage cluster of *shang* ‘inceptive.’ The above observation of abstract contiguity, we believe, is an attenuated version of ‘completive,’ with the element of physical contiguity having faded away, leaving behind only a vestige that is highly schematic so that it can only be instantiated in an abstract domain.

3. Conclusion

With the above analyses, we have identified the distinct patterns of concept elaboration for the six major semantic clusters of *shang* as a verbal complement, and have argued for the development of *shang* as a clear case of semantic attenuation (Langacker 1999). The structure of the semantic network of *shang* as a complement is laid out as below.

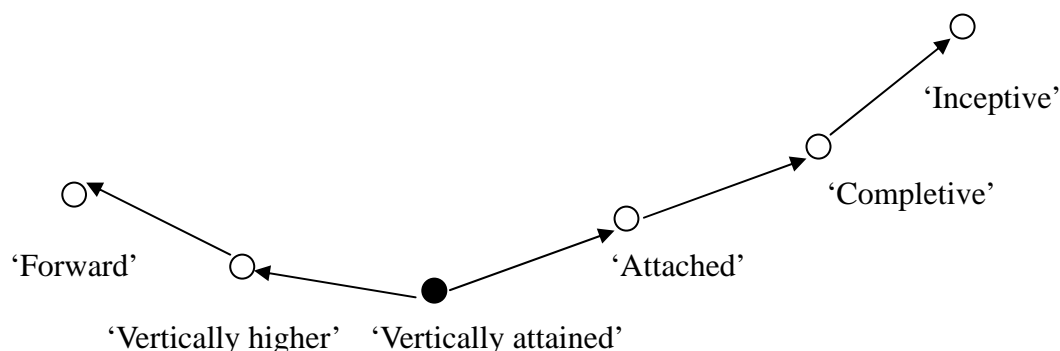


Figure 1: The organization of the core senses of *shang*

In addition to identification of the above senses, we also find that the semantics of *shang* is contingent on at least the following two factors: It may first of all be determined by its preceding verb as its immediate autonomous predication (Croft 2001; Langacker 1987), given the close conceptual alignment between *shang* and the verb. Moreover, the semantics of *shang* can also be influenced by a noun phrase in the co-text, since the construction of [V] – [SHANG] is in turn conceptually dependent (Croft 2001; Langacker 1987) on a noun phrase in the co-text.

The contribution of the present paper is three-fold. It firstly explores the possible semantic patterns of *shang* as a frequent spatial term in Mandarin. In addition to that, we have shown for attenuation to be an important force that shapes the semantic network of *shang*. Furthermore, with the notion of conceptual autonomy and dependence, we hope to clarify the details of how the meaning of a verbal complement co-varies with its co-text, with *shang* as an illustration.

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