Lu, Wei-lun

### A conceptual exploration of polysemy : a case study of (V) - (UP) and (V) - (SHÀNG)

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# MUNI Arts



## A Conceptual Exploration of Polysemy:

A Case Study of [V] – [UP] and [V] – [SHÀNG]

Wei-lun Lu (呂維倫 博士)

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# 1 LANGUAGE, SPACE AND THOUGHT

Language is a marvellous cognitive ability. The acquisition of a first language takes no noticeable effort and seems natural to most human beings. Understanding figurative language may also seem too intuitive to waste time discussing, given the fact that the comprehension of metaphor is always accomplished in a flash. However, the potential figurative meanings associated with even a single lexical item is infinite, and the semantics of spatial particles<sup>1</sup> is an extremely difficult puzzle, especially when it comes to how a spatial particle conveys subtle meaning in context. The present study will take up this thorny issue, exploring some possible connections between language, space and thought.

#### 1.1 Problem statement

The literature on spatial particles has shown that, very often, one single particle can exhibit highly complex patterns of meaning,<sup>2</sup> the majority of which are figurative. The following instances<sup>3</sup> illustrate how versatile the meaning of a spatial particle can be.

<sup>1</sup> I use the term "spatial particle" in a broad sense (e.g. Lindner 1983; Lindstromberg 1997; Rudzka-Ostyn 2003; Tyler and Evans 2003), which conceptually encodes a certain idealized spatial configuration and may be syntactically realized as a strictly-defined preposition, a directional adverb, or even merely as a particle. As is shown in the above discussions on English spatial particles, a lexical item representing an idealized spatial configuration can indeed exhibit highly versatile syntactic behavior.

<sup>2</sup> Throughout this study, the word "meaning" refers to the relation between the various functions coupled with a linguistic form in a broad sense.

<sup>3</sup> Excerpts used in the present study are authentic corpus data, unless otherwise indicated.

#### 1 Language, Space and Thought

- (1-1) Marion Conroy was on stage until the final curtain calls and came up the stairs with the rest of the cast afterwards...<sup>4</sup>
- (1-2) [Y]ou were not to look at your masters when they came up the drive, but to hoe on regardless.

Instance (1-1) involves up as a typical preposition, following the verb *came* and followed by the noun phrase *the stairs* to mean 'higher,' and the up in (1-2) also follows the same verb *came* and is followed by a noun phrase *the drive*, which seems to mean 'along.' These two instances exhibit identical syntactic behavior, but are somewhat different in meaning.

For many, the meaning of the spatial particles in the above instances may seem transparent, but examples such as (1-3) and (1-4) are less so.

(1-3) A rising sound between a crow and a cheer came up from the men.

(1-4) Can you give me one more day to come up with something?

In (1-3) and (1-4), where up similarly follows the identical verb *came/come*, up is not followed by a noun phrase, but instead by another preposition (*from* and *with*, respectively). The syntactic behavior of up in these examples seems less like that of a typical preposition. In addition, the meanings in these two instances are, in comparison to (1-1) and (1-2), more abstract and less easy to capture. In (1-3), up appears to mean 'audible', and in (1-4) 'present (with someone)'. Although the meanings in (1-3) and (1-4) are different from those in (1-1) and (1-2), the use of up in these four cases is entirely natural, yet too abstract for a learner of English or even a native speaker to pinpoint.

Examples (1-5) and (1-6) further complicate the matter:

(1-5) She sounded indignant and resentful, and he slowed **up** deliberately.

(1-6) The men have been locked up in their cells since day one of their imprisonment.

The meaning of up is also figurative in (1–5) and (1–6), where one can hardly identify the spatial meaning encoded. In (1–5), *slow up* seems to mean 'decrease the speed to a certain extent,' and up in (1–6) does not really seem to mean anything substantial and can be omitted without a major change in the meaning of the excerpt. Do such eccentric usages of up relate in any way at all to its spatial meaning of being vertically higher?

<sup>4</sup> Words used as examples from a specific language (English or Chinese) are in italics throughout the text.

With the above instances from (1-1) to (1-6), I hope to have demonstrated the semantic complexity of up as a spatial particle. Therefore, a study on the versatile usage patterns of up seems to be an academic pursuit that presents both challenge and promise, especially on how to explain the semantic functions of the particles at the cognitive level. There are two other good reasons to focus on up: first, up represents the positive pole of both the VERTICAL<sup>5</sup> and the SCALE schema, both of which play a critical role in human perception and cognition (Boers 1994; Johnson 1987). Secondly, up is the most productive particle in English phrasal verbs (Dehe 2002: 6; Rudzka-Ostyn 2003: 75). In order to explore the motivation of the versatile functions of the meanings of up, I will firstly identify the semantic patterns of up and, based on that, will see whether any conceptual semantic relation can be established among those diverse usages.

### 1.2 The study of up from a cross-linguistic perspective

I have chosen to compare and contrast the use of up in English and its equivalent *shàng* in Mandarin Chinese. A cross-linguistic comparison such as this has two major benefits. On one hand, a comparison that reveals the similarities between languages will enable us to make a cross-linguistic generalization, with a view to identifying the cognitive principles, if any, that may be fundamental to the human capacity of language in general. And at the same time, the above cognitive principles, once identified, should be able to account for the cross-linguistic differences shown by a contrastive study, if such principles do exist but work in different languages in different ways.

To this end, this study investigates the positive pole of the vertical dimension in Mandarin Chinese, encoded by *shàng*, as a counterpart of *up*. There are a few reasons to justify a comparison of *up* and *shàng*. First, *shàng* similarly encodes an obvious spatial meaning, as in (1-7).

(1-7)	(1–7) dàihuì wŏ		pá-shàng	wū-ding	qù
	later	Ι	climb-SHANG	house-top	go
	<i>chăn-yì-chăn</i> shovel-TNTV-RED		<i>xuě</i> snow		

"Later, I'll climb onto the roof to shovel the snow."

<sup>5</sup> Use of lower caps is representative of a concept, according to the tradition in Cognitive Linguistics.

1 Language, Space and Thought

A comparison between (1-7) and (1-1) shows the similarity between up and *shàng*, since they both encode a concrete sense of an upward orientation in space.

In addition to a strong spatial sense, *shàng* also carries abstract meanings comparable to what can be seen for *up*. Examples (1-8) and (1-9) are cases in which we can find rough correspondences to *up*.

(1-8)	tàiyang!	kàn	wŏ	lái	zhuī-shàng
	sun	look	Ι	come	chase-SHANG
	nĭ,		shèng-guò	nĭ!	
	you		win-PFV	you	

"Sun! I am here to catch you up and to conquer you!"

(1-9)	yèzhě	jiāng	tiěmén	guān-shàng	
	owner	DSPL	gate	close-SHANG	
	jìxù		yíngyè		
continue			in business		

"The owner (of the shop) kept the gate shut and resumed business."

Shàng in the above instances analogously follows a verb, and its combination with the preceding verb roughly corresponds to a verb-particle construction that contains up in English. The assembly of  $zhu\bar{i}$ -shàng 'chase-SHANG' in (1–8) can be translated into English as *catch up*. It is interesting to note that neither  $zhu\bar{i}$ -shàng nor *catch up* portrays a vertical motion in a strict sense. In a similar vein,  $gu\bar{a}n$ -shàng 'close-SHANG' in (1–9) can be translated into the verb-particle construction of *close up* in English. As with  $zhu\bar{i}$ -shàng and *catch up*, no vertical sense can be found in  $gu\bar{a}n$ -shàng or *close up*, either. Therefore, a rough comparison between up and shàng reveals at least three important commonalities between English and Chinese: Firstly, in both languages, the positive pole of the vertical dimension seems to exhibit a complicated pattern of conceptual flexibility, where the lexical constructions that encode a typical upward spatial configuration may come to express vague concepts that cannot be readily identified with the original ones. Moreover, such abstract concepts extending from similar spatial origins seem to overlap to a certain extent across the languages based on the above comparison.

With the above illustrations, I hope to have provided good rationales for studying *up* and *shàng* with a view to cross-linguistic comparison and contrast. Therefore,

in addition to exploring the opaque usage pattern of up and the possible connections between its various meanings, the present study will also look into the following issues: First of all, I will look into the usage patterns of *shàng* to see whether any relations can be found between its various meanings. After that, I will compare and contrast the usages of up and *shàng*, which I expect to help shed light on the underlying cognitive principles that may account for their semantic flexibility. In addition to identifying the cognitive principles that motivate the multiple meanings of up and *shàng*, I will measure their respective semantic networks against those underlying cognitive principles, so that the principles can elucidate not only the semantic similarities between up and *shàng* but also their differences.

#### 1.3 The conceptual significance of up and shang

Some of the above issues have been addressed in Cognitive Linguistics literature in various levels of detail and from different perspectives. The phenomenon represented from (1-1) to (1-6) and (1-7) to (1-9) is polysemy, which refers to a lexical construction that has multiple readings that are connected (Cruse 2000: 109). In previous literature, the meanings of *up* has been discussed by Boers (1994), Cappelle (2005), Lindner (1983), Lindstromberg (1997), Rudzka-Ostyn (2003), Tyler and Evans (2003) and Lu (2016), and the semantics of *shàng* has been explored by Chou (1999), Soon and Chung (2012), Hsu (2001), Kim (2005), Li (1999), Su (1997), Su (1998) and Lu (2015a, 2015b, 2017a). These numerous studies on *up* and *shàng* clearly illustrate the importance of spatial particles as a topical issue in linguistics. But why has the issue attracted so much scholarly attention?

Psychologists have argued that sensory-motor experiences form a conceptual basis for human language and thought (e.g. Lloyd, Sinha and Freeman 1981; Mandler 1988, 1992). Mandler proposed that at a very early stage of development, perhaps even before an infant starts producing language, it attends to and interacts with physical objects in its environment, and such perceptual inputs are analyzed into conceptual products that are capable of representing meaning. Such re-description of sensory-motor experiences maps spatial structures onto conceptual structures, forming the substrate of human semantic architecture. The belief in a close connection between sensory-motor experiences and language is found not only in developmental psychology but also in philosophy and linguistics (e.g.; Grady 1997; Johnson 1987; Lakoff 1987; Langacker 1987; Talmy 1983). In Cognitive Linguistics, many researchers have claimed that image-schemas, as idealized sensory-motor patterns, form the conceptual basis for human language and thought. Therefore, it follows that *up* and *shàng*, which are

symbolic of the positive pole of the VERTICAL schema, are conceptually significant in this sense and are worth in-depth exploration.

#### 1.4 A corpus-based approach

Brugman (1988), Lakoff (1987), Dewell (1994), Vandeloise (1991, 1994), and others have shown how research on the meaning of spatial particles can help shed light on the intertwined relations between language, space and cognition. However, these early cognitive linguistic studies on spatial particles adopted an intuition-based methodology which has come under criticism in the recent decade. Studies using authentic data (e.g. Atkins 1993; Gries 2006; Kilgarriff 1997; Stefanowitsch 2003; Su and Lu 2009) have argued against native speaker intuition as the only source of data for linguistic research. In particular, advocates of corpus-based methodology claim that researchers' reliance on intuition may risk losing sight of some important patterns in language, and that invented examples very often misrepresent the real usage of a lexical item (Lu, Kudrnáčová and Janda ed. 2021). To avoid these pitfalls of intuition-based research, the present study will be largely based on real occurring examples extracted from corpora, while examples constructed after authentic instances will be used only when necessary.

Below is an overview of the organization of the whole study. Chapter 2 provides a review of how previous research has approached the issue of polysemy, discussing how the role of context has been addressed up to now. In this chapter, I look at the previous studies of up and shàng, pointing out their contributions and limitations and analyzing the theoretical assumptions behind the studies. After that, I present the theoretical framework adopted in the present study in response to the unexplored issues in the previous studies. Chapter 3 presents the method and the data employed. Therein, I specifically introduce the composition of my corpus and how I analyzed the data. In Chapter 4, I will go into an image-schematic analysis of the core senses of up, and will identify the prototypical sense based on Evans' (2004) methodology. In this chapter, I will demonstrate how *up* and its co-text work in a collaborative fashion to create different senses and to prompt the imagistic structure at the conceptual level. The metaphorical senses are dealt with in Chapter 5, where I discuss how up interacts with the conceptual domain prompted by its co-text to develop the metaphorical readings. Chapter 6 is devoted to an image-schematic analysis of shàng, looking into how shàng and its co-text co-contribute to the imagistic structure and the various meanings. I will only cover the core senses of *shàng* due to limits of space. Based on the analyses in Chapters 4 to 6, Chapter 7 discusses the pivotal concepts that may help us understand and organize the semantic networks of up and shàng,

including attenuation, subjectification, and interaction with archetypal conception (Langacker 1987, 1999, 2006, 2008). Chapter 8 will be a recapitulation of the findings and will include the possible implications of this study.

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# 2 LITERATURE REVIEW

In this chapter, I review the relevant literature. Section 2.1 covers how context may affect the meaning of a word to give rise to various readings. In 2.2, I address the problem that has been posed by the complexity of context. Section 2.3 is devoted to how the previous studies deal with up, and Section 2.4 to how the previous studies approach *shàng*. Section 2.5 reviews Principled Polysemy (Evans 2004; Tyler and Evans 2003), a theoretical model that has high potential for accommodating relevant contextual elements. Section 2.6 introduces a notion in Cognitive Grammar that was not employed by Lindner (1983) but may be useful in the discussion of polysemy; semantic valence.

#### 2.1 Polysemy as contextualized patterns of meaning

Taylor (2003a: 653), from a usage-based perspective of language, regards meanings as "contextualization patterns". However, a gap still exists in the literature regarding how meaning is patterned with regard to context, given the highly protean and hardly manageable nature of context.

In many sub-fields of linguistics, the phenomena of contextual influence on the reading of a lexical item have been extensively reported. Two oft-cited instances are Pustejovsky's (1991) "type coercion" from the computational paradigm and Cruse's (1986, 2000) "contextual modulation" in lexical semantics. Pustejovsky proposes the term "qualia structure" to illustrate how a verb can combine with a noun by focusing on one of the qualia types of the noun: constitutive, formal, telic, and agentive. The verb *begin*, for instance, singles out the telic role of *novel* in the phrase to *begin a novel*. The interpretation of *novel* hence depends heavily

on the verb that appears next to it. Cruse's contextual modulation distinguishes two meaning facets of *car*: first in *to wash a car*, where the lexeme refers to the exterior part of the automobile, and then in *to service a car*, where the word represents the internal movable components of an automobile. In these two examples, the readings of the nouns, *novel* and *car*, are under the influence of the verbs that accommodate them. It must however be noted that the essence of type coercion and contextual modulation lies not only in the textual contribution to the target lexeme, i.e. *novel* and *car*, but in the entire knowledge base that lies beneath the idealized cognitive model<sup>6</sup> of NOVEL and CAR, and most important of all, the human experience of interaction with these artifacts.

The concept of context is still used as a monolith in Cruse's and Pustejovsky's studies. This is because the studies approached meaning from a lexical semantics perspective, and therefore naturally were not able to focus on whether a modeling of context can lead to a more satisfying analytical result. Another point to note is that Pustejovsky's and Cruse's illustrations of how context affects the meaning of the target word address the interaction between a verb and a noun, which are both content words but not functional words like a preposition.

Concerning prepositions, Tyler and Evans (2001, 2003), in their discussion of the spatial sense of *over*, give a classic example of how meaning is under contextual influences. The authors (2003: 69ff) argue that spatial particles carry schematic conceptualizations which are interpreted within the particular contexts in which they occur. The "ABC trajectory" sense of *over* as in *The cat jumped over the wall* is inferred from the integration of linguistic prompts at the conceptual level and the real-world knowledge invoked by the prompts. The trajectory is not prompted by the linguistic form *over* per se, but instead arises from the integration of *over*, *wall*, *cat*, and what we know about how a cat's jumping relates to a wall.

In addition to nearby lexical items and encyclopedic knowledge, another possible candidate of contextual influence on prepositional meaning is the grammatical construction in which a preposition appears. In Tyler and Evans' (2003:61) study of *over*, the "conceptual significance of syntax" is touched upon:

Given that syntax is meaningful, in principle in the same way as lexical items, it follows that differences in syntactic form reflect a distinction in meaning.

However, the influence of syntax played only a secondary role in their discussion and was not discussed systematically. It was not until Evans (2004) developed a more refined version of Principled Polysemy that the component of

<sup>6</sup> For a clear definition of "idealized cognitive model", see Lakoff (1987).

syntax was included and addressed in detail. A review of Principled Polysemy (henceforth PP) and a comparison between its two versions will be given in Section 2.5.

Up to this point, I have demonstrated that the multiple readings of a word should be considered the patterns in which a lexical item interacts with relevant contextual factors. Below, I will give a clear definition of context as the groundwork for a detailed context-based semantic analysis.

#### 2.2 Context

In linguistics, context can be roughly divided into linguistic and extra-linguistic contexts. In 2.2.1, I cover the influence of linguistic context, referred to as "cotext" by Sinclair (1991), on lexical meaning, and in 2.2.2, I introduce a type of extralinguistic context called knowledge patterns and what it means in previous literature.<sup>7</sup>

#### 2.2.1 Co-text

From the perspective of lexical semantics, a word's meaning is dependent on its nearby linguistic items (Cruse 1986; Pustejovsky 1995). Cruse (1986) and Geeraerts (1993), among others, propose many methods to decide whether a word is ambiguous or general between two meanings. Their methods are based on comparisons between single constructed instances. The credibility of these methods was later challenged by corpus linguists such as Kilgarriff (1997), based on the fact that such tests only present cases that are clearly distinguished, but for usages that our intuition considers to be unclear, the tests would not work. Kilgarriff also points out that when two native speakers' opinions are in conflict, such simple qualitative, intuition-based approach would fail to reach a convincing conclusion.

The problem of natural language processing and "word sense disambiguation" (henceforth WSD) has also been addressed in corpus linguistics. In 1957, Firth published this famous line, which has been adopted as an axiom in corpus linguistics: "A word is known by the company it keeps." The main concern for experts in WSD is to pick out the right meaning by observing the possible behavioral patterns of a lexical item. Kilgarriff (1997: 91), for instance, writes:

Another type of extra-linguistic context, the physical situation, was also mentioned in Croft and Cruse (2004) and Wilson (2003). However, given the written nature of the linguistic data adopted in the present study, it is beyond my scope to study the influence of this contextual element on the meanings of *up* and *shàng*.

Many words have more than one meaning. When a person understands a sentence with an ambiguous word in it, that understanding is built on the basis of just one of the meanings. So, as some part of the human language understanding process, the appropriate meaning has been chosen from the range of possibilities.

The lexico-computational approach, represented by Atkins (1993), Kilgarriff (1997), and many others, tries to understand the flexibility of word meaning from a corpus-generated approach. The merit of this approach is that they extend the operational definition of word meaning from a subjective into a more objective domain. The study of meaning has thus undergone a switch from introspection to extracting information of a word along with its co-texts. In his study of the word *handbag*, Kilgarriff (1997) argues that the concept of "word senses" cannot be defined in a workable way as a basic unit of meaning. Instead, word senses arise from clusters of tokens, and if a group of usage is large enough in number and is distinct from the others, it can be recognized as a sense.

It is not until recently that the field of cognitive semantics has also relied on corpus evidence for sense distinctions. For instance, Fillmore and Atkins (2000) base their analysis of *crawl* on a complete concordance, and suggest that the many meanings of *crawl* are experientially motivated and that an explanation needs to rely on frame semantics. Gries (2006), further following Atkin's (1987) ID tags and Hanks' (1996) notion of "behavioral profile", generates and analyzes the meaning patterns of *run* from corpora, arguing that corpus-linguistic methods can provide objective empirical evidence to WSD. The above two studies investigate content; as for grammatical constructions and functional components, Stefanowitsch (2003) approaches the alternation of the s-genitive and of-genitive in English. It was traditionally held that these two grammatical constructions were semantically equivalent, but Stefanowitsch overturns that assumption by looking into the properties of the NPs in the constructions. He finds that the s-genitive encodes a possessor-possessee relation while the of-genitive a part-whole relation. Evans (2004, 2006), in keeping with the gist of Atkins (1987), Gries (2006) and Stefanowitsch (2003), argues that each lexical concept has its distinct lexical profile, which exhibits a cluster of selectional tendencies. In Chinese Linguistics, corpus methods have been applied to the study of various linguistic phenomena such as the semantics of numerical classifiers (Dosedlová and Lu 2019; Dosedlová and Lu, 2021), among others.

Albeit with different methods and theoretical concerns, all these studies have made one point clear: A proper description of word meaning requires a detailed description of its co-text. The notion of co-text in the present study will be strictly defined in line with Croft and Cruse (2004: 102) to mean the immediate linguistic environment of a word that constrains its construal.

#### 2.2.2 Encyclopedic knowledge and experiential domain

In pragmatics, it has been well-established that understanding a sentence in context requires much more than knowledge of what is coded by the sentence *per se* (Grice 1975, 1978; Reddy 1979). It has been argued that language understanding is based on rational inferences not simply about what is uttered, but also about the immediate context, knowledge of the speaker's beliefs and intentions, and background knowledge about the workings of the world.

In Cognitive Linguistics, it has also been generally accepted that meaning is embodied and situated (e.g. Grady 1997; Johnson 1987; Lakoff and Johnson 1980, 1999; Langacker 1987; Sweetser 1990; Tyler and Evans 2001, 2003; Evans 2004, 2006). Based on this assumption, encyclopedic knowledge, or patterns of information that help in understanding language, is deemed necessary for language comprehension (Fillmore 1976; Langacker 1987; Evans 2006). Fillmore (1976), for instance, proposes that an understanding of a word would involve the entire knowledge structure in which the word is relativized. Such knowledge structures are modeled as "semantic frames". The stock example would be Fillmore's COMMERCIAL TRANSACTION frame, which is necessary in the understanding of the verbs buy and sell, among others. The author claimed that the meaning of transaction verbs is understood with reference to our recurrent knowledge of the commercial domain as a conceptual prerequisite for interpreting the meaning of the verbs. Langacker (1987) similarly points out that the scope of predication of a word involves its base and profile in an experiential domain, where the profile refers to a part of substructure within a larger conceptual unit, i.e. the base. For instance, the word hypotenuse 'the longest line of a right-angled triangle', profiles a subpart of, and is designated within, a larger conceptual unit of a right-angled triangle in the domain of SPACE, which is the base of the construal.

The importance of encyclopedic knowledge similarly holds in the study of prepositional meanings. Herskovits's (1986, 1988) studies on the relation between prepositions and spatial cognition suggested that geometric-spatial relations do not suffice to explain the range of usages of spatial particles. Herskovits recognized that the way humans interact with spatial configurations is a critical component of the meanings exhibited by spatial particles. Vandeloise (1991, 1994) holds a consonant opinion, and argues that function constitutes the relevant factor that decides how we conceptualize and linguistically realize a spatial scene. He contrasts the following instances:

- (2-1) The bulb is in the socket.
- (2-2) \*The bottle is in the cap.<sup>8</sup>

<sup>8</sup> Following the tradition in linguistics, an asterisk marks the unacceptability of an example.

#### 2 Literature Review

This pair depicts the same geometric-spatial relations, only with different pairs of tr's and lm's.<sup>9</sup> In (2-1), the entity that is spatially higher is *the socket*, and is chosen as the secondary figure, the lm, in the spatial scene. In contrast, the spatially higher entity in (22) is *the cap*, but the acceptability of that entity chosen as the lm is dubious. Vandeloise indicates that although the spatial relation between the tr and the lm remains consistent for (2-1) and (2-2), human understanding of the tr's and the lm's (the way the entities function and interact) also plays a crucial role in our use of spatial components. Sinha and Jensen de Lopez (2000) is in line with the above in proposing that the concept of CONTAINMENT has not only its logical property but also its functional property, and the functional aspect exerts great influence on how we use and understand spatial concepts. In Tyler and Evans' (2001, 2003) discussion on the ABC trajectory use of over (mentioned previously in 2.1), the authors also emphasize the importance of encyclopedic knowledge by detailing how such knowledge facilitates the online meaning construction of The cat jumped over the wall. Based on this premise, PP tries to embody the role of world knowledge with an addition of the Functional Element, which refers to patterns of human embodied experiences associated with the abstracted and idealized prototypical meaning of a preposition. In Tyler and Evans' discussion of over, for instance, the Functional Element of over is understood as the tr and the lm being in each other's range of influence, suggesting potential contact between them, which poses some constraint on what may count as *over* and so can be understood to constrain the meaning extension and usages.

From the above review, the significance of encyclopedic knowledge and its influence on lexical meaning is evident. In the present study, world knowledge will be broadly defined as a remembered realm of experiences against which an expression is processed, and such knowledge is often arbitrarily organized as a domain, depending on the comprehension task at hand.

Now that I have delineated the notion of context, which includes linguistic cotext and encyclopedic knowledge organized in the form of conceptual domains, I will move on to a review of the previous studies on *up* and *shàng* and discuss the role of context therein.

<sup>9</sup> A tr (trajector) refers to the most prominent figure in a conceptual scene, where as a lm (landmark) represents the secondary figure. In Langacker's (1991) earlier publication on CG, the notation of trajector and landmark is inconsistent, sometimes in upper case (TR/LM) and sometimes in lower case (tr/lm). However, in later publications (1999, 2008), the author consistently uses the lower case. Here, I follow the more recent practice by also putting tr and lm in lower case.

#### 2.3 Previous studies on up

The semantics of prepositions has been a topic of central importance within Cognitive Linguistics since the 1980s. The meaning of up has been extensively studied (Boers 1994; Cappelle 2005; Lindner 1983; Lindstromberg 1997; Rudz-ka-Ostyn 2003; Tyler and Evans 2003). Cappelle (2005) deals only with the telicizing function of up as a particle and does not go into a discussion on the semantics of up. Rudzka-Ostyn (2003) is a pedagogical textbook organized in terms of cognitive principles, with relatively little explanation, albeit a wide variety of exercise. Therefore, although Cappelle (2005) and Rudzka-Ostyn (2003) do provide useful examples and explanations, these works will not be reviewed in detail and will be cited in my analysis only when necessary.

Below, I review three major approaches to the various meanings of *up*. Section 2.3.1 addresses the Cognitive Grammar approach (Lindner 1983). 2.3.2 is devoted to the Conceptual Metaphor Theory approach (Boers 1994; Lindstromberg 1997), and in 2.3.3, I discuss the Principled Polysemy approach (Tyler and Evans 2003).

#### 2.3.1 A Cognitive Grammar approach to up

Lindner (1983) used Cognitive Grammar (henceforth CG)<sup>10</sup> to analyze the meanings of up in English verb particle constructions (henceforth VPCs). She argued that up invariably contributed to the meanings of VPCs and that the diverse meanings of up were related so that these usages of up formed a unified concept.

One of the major contributions of Lindner's work is the proposal of Interactive Focus, which is "the realm of shared experience, existence, action, function, conscious interaction and awareness" (Lindner 1983: 132). With this concept, the author explained why *up* and *out* could have similar meanings, as in *100 people turned out/up for the picnic* and *John brought out/up some interesting facts* (Lindner 1983: 137). However, despite these important contributions, Lindner's heavy reliance on the tr-lm relation prevented her from addressing the role of co-text. Since the interaction between *up* and its co-text is not Lindner's major concern, the notion of "semantic valence" in CG, discussed later in Langacker (1987) and Croft (1993, 2001), was not included in her work. I believe that semantic valence will help describe how *up* interacts with its co-text, which I will turn to in a later section of review.

<sup>10</sup> What Lindner followed was Space Grammar (Langacker 1982). It is not until the version of Langacker (1987) that the theoretical model is known by the name of CG.

## 2.3.2 A Contemporary Theory of Metaphor approach to up

Boers (1994) and Lindsrtomberg (1997) are semantic analyses of up based on the Contemporary Theory of Metaphor (Lakoff and Johnson 1980). Based on authentic data, Boers (1994) discussed several prepositions along the UP-DOWN and the FRONT-BACK dimensions in English. The basic structure of Boers' analysis is similar to that of Lindner (1983) in that they both rely on the tr-lm relation as a major criterion for the classification of senses. In Boers's work, conceptual metaphor and metonymy are important motivations that derive abstract meanings. The author's explanations for figurative uses are sometimes slightly different from those in Lindner (1983) and are useful. With a sufficiently large corpus, the work is also capable of providing authentic instances and of giving statistics for the distribution of the meanings. However, Boers's approach similarly paid little attention to the role of co-text, with the tr-lm relation and metaphorical derivation as the major concerns in his analysis. The second attempt based on the Contemporary Theory of Metaphor is Lindstromberg (1997), which claimed that only a minority of prepositions are thoroughly idiomatic. Although the author's explanations are useful and easy to understand, the work lacks a systematic and in-depth analysis of theoretical interest. The role played by co-text is not the concern of Lindstromberg's work either.

### 2.3.3 A Principled Polysemy approach to up

Tyler and Evans' (2003) analysis on up is based on their model of PP, which claims to accommodate the role of world knowledge and linguistic co-text. However, the authors' analysis on up is only partial. In addition, although the authors mentioned the importance of linguistic co-text and syntax, the issue is not well addressed in their analysis of up. That said, PP remains a model that exhibits great potential to accommodate relevant contextual factors in the process of meaning derivation. It therefore deserves an in-depth discussion in a later section.

## 2.4 Previous studies on shàng

Given its conceptual significance and its versatile semantic functions, studies on the Mandarin *shàng* are as abundant as those on *up*. Related studies include Chou (1999), Soon and Chung (2012), Hsu (2001), Kim (2005), Li (1999), Su (1997) and

Su (1998). Among the studies, Chou (1999), Soon and Chung (2012), Kim (2005) and Su (1998) are related to the immediate scope of the present study, which is the schema of  $[V] - [SHANG]^{11}$  as the counterpart for [V] - [UP], which will be reviewed below.

#### 2.4.1 A Conceptual Structure approach to shàng

In a study by Chou (1999) founded on Jackendoff's (1983, 1990) conceptual structure approach, the author characterized conceptual elements that motivated meanings of the Chinese verbal complements *shàng* and *xià*. In particular, Chou adopted parameters such as THEME, SOURCE, GOAL and DIRECTION in analyzing the usage of a verbal complement in a motion event. However, the scope of the work is largely confined to concrete meanings. In addition to a focus on meanings in the domain of SPACE, the concentration on the interaction between conceptual structure and semantics naturally directs the author's attention away from the role played by the co-text of *shàng*.

## 2.4.2 A Contemporary Theory of Metaphor approach to shàng

Su (1998) worked with the Contemporary Theory of Metaphor and proposed the up-down orientation as the basic meaning of the spatial term, with three metaphorical senses derived through GOOD IS UP, MORE IS UP, and POWERFUL IS UP. One of the contributions of the work is to look at the meanings of *shàng* within one single part of speech. For instance, Su (1998: 67) looked at the semantic change of *shàng* as a verb, observing how the semantics of the verb gradually shifted away from the concrete conceptual domain. However, given the author's focus on the connections between metaphor, metonymy and lexical meaning, the role of cotext is also absent in the work.

### 2.4.3 A Principled Polysemy approach to shàng

Kim (2005) made another attempt to investigate the semantics of *shàng* from a Cognitive Linguistic perspective. Working with PP, the author distinguished the prototypical sense of 'on' from the other non-prototypical senses, based on the image-schematic structure. Kim proposes four conceptual metaphors to explain

<sup>11</sup> A related experimental work on *shàng* is Liang and Sullivan (2019), which however deals with the construction [SHANG] - [N].

the figurative meanings of *shàng*: SUPERIOR IS SHANG; EMPEROR IS SHANG; SKY IS SHANG; GOD IS SHANG. However, since the study followed PP, the role of co-text and syntax was similarly not addressed in Kim's analysis.

## 2.4.4 A Corpus linguistic approach to shàng as a locative particle

The above reviews show that the issue of co-text has been rarely dealt with by the previous studies on *shàng*. In view of this gap, Soon and Chung (2012) attack the problem from a corpus linguistics perspective. The authors investigate the following four near-synonymous constructions of *zài… shàng, zài… shàngmiàn, zài… shàngtóu*, and *zài… shàngbiān* in the corpus of Chinese GigaWord. The study nicely captures the functional division among the four constructions that all contain *shàng* as a locative particle, but is not relevant to the semantics of *shàng* in the [V] – [SHÀNG] construction.

## 2.5 PP: A semantics-based model of polysemy

With the above reviews, I hope to have shown that the patterning of context with respect to the various readings of *up* and *shàng* has not been fully explored, especially the way how *up* and *shàng* interact with their co-text to create multiple readings. Below, I return to a discussion of PP, which I believe exhibits the highest potential to accommodate necessary contextual elements in the analysis of the meaning of a spatial particle.

## 2.5.1 Tyler and Evans' (2003) version of PP

This early version of PP is based on a two-fold methodology: First, for a meaning to count as a distinct sense, it should contain an additional meaning not found in any other senses. There must in addition be instances of the meaning that are context-independent. In this version, the authors only lay out a partial analysis of *up*, including "the More Sense," "the Improvement Sense," and "the Completion Sense" that form "the Quantity Cluster". Working within the cognitive-experientialist framework, PP addresses how the diverse meanings of English prepositions can be networked together. Tyler and Evans argue that the extension of prepositional meaning is systematic and principled, and accordingly propose a methodology to distinguish distinct senses from context-dependent implicatures. In addition to sense distinction, another major methodological contribution of PP is how to determine the primary sense in the semantic network, based on five

criteria: (1) earliest attested meaning; (2) predominance in the semantic network; (3) use in composite forms; (4) relations to other spatial particles; and (5) grammatical predictions. The criteria regarding sense establishment allow for a more objective classification of meanings and constitute the major contribution of the model.

However, there were some problems in PP which needed to be addressed. The methodology of PP is a double-edged sword that might bring the analysis under attack due to its vagueness. The first criterion regarding additional meaning was still not sufficiently objective and well-defined. The second criterion of looking for context-independent cases was flawed by the lack of authenticity of the linguistic examples used in the authors' discussion. As Tyler and Evans themselves confess in the conclusion to their study, the analysis would have been less speculative had it been based on a corpus analysis.

To address the first problem of the meaning criterion being subjective, Evans (2004) revised the model by proposing the Concept Elaboration Criterion and the Grammatical Criterion. The second problem of the data type anticipates recent criticism in cognitive semantics, whereby many researchers have reacted against the traditional intuition-based approach. I will return to this in Chapter 3.

#### 2.5.2 Evans' (2004) revision of PP

Evans (2004) is a continuation of Tyler and Evans (2003) with methodological revisions. The theoretical backbone in the first version of PP, embodied cognition and principled semantic extension, is retained in the 2004 version. The major difference from the previous version is the clearer criteria of sense establishment. Evans's new version of PP contains three criteria instead of two. The first is the Meaning Criterion, which corresponds to the first criterion of "additional meaning" in Tyler and Evans (2003). In addition to the Meaning Criterion, Evans proposed two other criteria, the Concept Elaboration Criterion and the Grammatical Criterion, in order to more properly accommodate contextual elements into PP. The Concept Elaboration Criterion concerns the selectional or collocational patterns of a lexeme. For example, the Matrix Sense of *time* is elaborated in terms of motion, such as Time flows/runs/goes on forever, while the Moment Sense is elaborated in terms of deictic motion, as in The time for a decision has come/ arrived/gone/passed. The Grammatical Criterion states that each lexical concept of a lexeme will be structurally dependent. This criterion, when applied to the study of time, concerns the grammatical profile of the lexeme, specifically whether it is used as a count noun, a mass noun, or a proper noun. Evans argued that, for a sense (or a "lexical concept" in his revision) to stand alone, it must satisfy the

Meaning Criterion and at least one other criterion. The revision in this respect enabled the later version of PP to better accommodate the role of co-text.

Besides proposing new criteria for sense distinction, Evans (2004) proposes slightly different criteria for primary sense decision. His five criteria are: 1) earliest attested meaning; 2) predominance in the semantic network; 3) predictability regarding other senses; 4) a sense with a plausible cognitive antecedent; and 5) a sense related to lived, or phenomenological human experience. The addition of the fifth criterion shows that Evans paid more attention to the role of world knowledge and human experience in his 2004 revisions than in the previous version of PP. The change that Evans made also reflected his ambition to extend the applicability beyond spatial particles.

With its better defined methodology and its focus on co-text and human phenomenological experience, the 2004 version of PP is more descriptively effective and better suits the purpose of the present study than its precursor.

#### 2.6 Semantic valence in CG

As has been pointed out in 2.3, semantic valence was an element of CG not present in Lindner's analysis. However, the idea of semantic valence has been argued to be crucial for a discussion on the interaction between the constituents in a symbolic combination (Croft 1993), so it is relevant to my analysis and will be reviewed below.

The idea of "semantic valence" was proposed by Langacker (1987), which Croft (1993) later used in a discussion on the role of domains in semantic extension. Langacker argued that what governed symbolic combinations was "conceptual autonomy" and "conceptual dependence". According to the author, most grammatical combinations are characterized by one predication<sup>12</sup> being identified as autonomous and the other as dependent, in this sense: "one structure D, is dependent on the other, A, to the extent that A constitutes an elaboration of a salient substructure within D" (Langacker 1987: 300). Consider (2–3) and (2–4) below (cited from Croft 1993, 2001).

(2-3) Hana sings.(2-4) Hana sings beautifully.

In (2-3), HANA, as a noun, which is a non-relational predication, fills in one of the two slots of the relational predication of SING, specifying the role of SINGER

<sup>12</sup> Croft (1993: 338) explains that what Langacker calls a "predication" is equivalent to what he terms a "concept", which refers to "a semantic structure symbolized by a word," and these two are used interchangeably in his analysis. I follow Croft's practice and use the two terms interchangeably.

in the relational semantic structure. HANA, in other words, constitutes an elaboration of a salient semantic substructure of SING. Note that the reverse does not hold, since the concept of SING does not form a salient substructure within HANA, although it may arguably be a small part of the knowledge structure within HANA. Therefore, in this symbolic combination, HANA should be viewed as the autonomous predication and SING the dependent one. It also follows from Croft's explanation that the distinction between an autonomous and a dependent predication is not categorical but is simply a matter of degree. As for (2-4), in the symbolic combination of SING BEAUTIFULLY, the predication SING elaborates a salient substructure of BEAUTIFULLY by indicating what kind of process is done in a beautiful manner. In comparison, BEAUTIFULLY elaborates only a non-salient part of SING by specifying the manner of the process. Hence on balance, SING is the autonomous predication and BEAUTIFULLY the dependent one. Here, SING is in turn dependent on HANA, as discussed earlier in (2-3), but is autonomous relative to BEAUTIFUL-LY. Therefore, the distinction between autonomy and dependence is not simply a matter of degree, but also a matter of relativity.

Croft (1993) further claimed that in a grammatical combination of a dependent and an autonomous predication, the autonomous predication can cause domain mapping, i.e. metaphorical extension, in the dependent one, while the dependent predication may induce domain highlighting, i.e. metonymic extension, in the autonomous one. The assumption behind such conceptual operation is what Croft refers to as "the conceptual unity of domain." Consider further the following instance with the preposition *in* for illustration (Croft 1993: 360):

(2-5) She's in a good mood.

In (2–5), the predication IN is dependent relative to GOOD MOOD, since GOOD MOOD elaborates a salient substructure of IN but not vice versa. According to Croft's insight, the word *in* should be metaphorically understood, in that IN is conceptually dependent on GOOD MOOD. To maintain the conceptual unity of domain, the dependent predication IN must be interpreted in the same conceptual domain as the autonomous predication GOOD MOOD and is thus metaphorically interpreted in the target domain of EMOTION.

From the above review, we can see that the idea of semantic valence, combined with the principle of the conceptual unity of domains, can help describe and analyze a metaphor-based semantic extension in a symbolic combination. These principles will come in handy in our discussion of the metaphorical senses of up in Chapter 5.

In the next chapter, I turn to a description of the analytical framework and data collection of the present study.

## 3 DATA AND METHODOLOGY

In this chapter, I introduce the theoretical framework, methodology and the scope of the present study. The following hypotheses are to be kept in mind as we go into the sections:

First, with a more empowered pragmatic module than the previous studies on spatial particles, I assume that, following the assumption of PP, the multiple readings of a spatial particle stem from its prototypical meaning. I hypothesize that a highly contextualizing approach is more suitable for describing the interaction between the prototypical meaning and relevant contextual factors than previous studies. I also believe that, with the results generated by a context-oriented approach, a comparison between the semantic networks of *up* and *shàng* can reveal the cognitive operations behind their semantic versatility.

In 3.1, I lay out the analytical framework of the present study, based on the above theoretical constructs. Section 3.2 introduces the data collection. Section 3.3 describes how the procedures were carried out in regard to sense decision and description. Section 3.4 delimits the present study.

#### 3.1 Analytical framework

With its symbolic commitment, CG claims that human language comprises symbolic assemblies of form-meaning pairings, and can be regarded as a type of construction grammar (henceforth CxG) in general (Langacker 2005). Compared to the other versions of CxG (Croft 2001; Fillmore, Kay and O'Connor 1988; Goldberg 1995), CG is cognitive in the sense that it takes a radical stance from which

grammar, i.e. the way constructions<sup>13</sup> are put together, is seen as resulting from a limited collection of basic cognitive abilities shared by linguistic and other psychological phenomena such as perception, categorization, and memory, which the other versions of CxG do not commit themselves to.

As Goldberg (1995) refers to constructions as form-meaning pairings, an appropriate CxG should be able to track down both the formal (syntactic) and the functional (semantic and pragmatic) aspects of a construction. With bi-polar assemblies that relate to both the phonological and the semantic pole, CG has the capacity to capture a wide range of formal structures, ranging from entirely fulfilled constructions to partially fulfilled and even highly schematic constructions in the form of constructional schemas, but at the semantic pole, it is not equipped with an appropriate methodology that distinguishes different semantic categories associated with a lexical item.

Therefore, if we can supply CG at the semantic pole with a compatible model with a strength in sense distinction, the resulting combination should be able to characterize lexical semantics in constructional terms and explain the semantics of a particular construction in a principled manner.

In this sense, PP is an ideal candidate for complementing CG with regards to the description of the semantic pole of linguistic representation. Set out to model prepositional semantics, PP makes use of idealized tr-lm configurations, which can be regarded as a version of CG in a broad sense (Michel Achard, p.c.). In addition, PP relates language use to basic cognitive abilities like perception and recognition of recurrent spatial patterns, which allows us to identify PP with the basic tenets of CG.

Besides its similarity to and compatibility with CG, the strength of PP is its ability to methodologically identify and distinguish clusters of usages of a spatial particle<sup>14</sup> at the semantic pole. Therefore, PP stands out as a useful supplement to CG in terms of partitioning the semantic space involved with a certain spatial particle into distinct senses, or clusters of uses. To this end, what comes in

<sup>13</sup> A "construction" can be of various sizes, ranging from as large as multi-word combinations to as small as a morpheme under the word level. In this sense, words like up and shang count as constructions as well.

Note that PP defines a spatial particle loosely to include one-word (such as *in*, *on*, *up*) constructions and multi-word constructions (such as *in front of*, *out of*), and even as broadly defined as adverbs or prepositions. In the case of *up*, there is no consistent label for this particular lexical item in previous studies. For instance, Lindner (1983) and Tyler and Evans (2003) call it a "particle", whereas Lindstromberg (1997) terms it a "preposition", although he also points out the grammatical behavior of *up* is too versatile to pinpoint. As I will show in the discussion later, sometimes *up* acts like an adverb, specifying the direction of a moving entity, but in some other cases, its syntactic behavior cannot be precisely defined. Therefore, in the present study, I follow the practice of Lindner (1983) and Tyler and Evans (2003) by adopting "particle" as an umbrella term for *up*. But when I refer to usage events where *up* can be clearly considered to specify the trajectory of an entity, a more specific term "adverb" is used.

handy is the three criteria of PP: the Meaning Criterion serves to capture the distinct characteristic of an entrenched usage associated with a lexical item at the semantic pole; the Concept Elaboration Criterion focuses on the selectional or collocational tendencies of that particular sense; and the Grammatical Criterion portrays the feature of the grammatical profile of the given sense. The latter two criteria are compatible with the concept of constructional schema in CG.

An analytic framework based on the combination of PP and CG has the following benefits: We can establish semantic categories by taking into account the Meaning Criterion. The Concept Elaboration Criterion clarifies the route of the meaning extension. The Grammatical Criterion helps generalize the grammatical pattern which is typical for a particular sense. I also assume that the distinct concept elaboration and grammatical profiling exhibited by each sense can be further explained by the basic tenets of CG, which views the meaningfulness of grammar as residing in basic human cognitive abilities.

#### 3.2 Data collection

The present study focuses on authentic language using a context-oriented approach.

The data for up was drawn from the British National Corpus (BNC) and Corpus of Contemporary American English (COCA) in order to establish the meaning patterns of up and to observe how metaphorical meanings are derived from context. I included the first 500 tokens from each corpus.<sup>15</sup>

As for *shàng*, I extracted the data from the Sinica Balanced Corpus. Since the usage patterns of *shàng* are investigated in order to provide a contrast to VPCs in English, I focus on the semantics of *shàng* in the constructional schema of [V] – [SHANG] from the 2,979 tokens extracted.

The examples cited in this study are all authentic unless otherwise specified. In addition, the BNC contains spoken data transcribed in less formal ways of spelling and with fillers, which may be barely intelligible in their original form.<sup>16</sup> Such tokens are slightly modified into written English for the purpose of presentation. A small number of tokens in the BNC which were ungrammatical and opaque were excluded.

<sup>15</sup> Sinclair (2004) argues that an outline of a word's usage requires at least 20 tokens for not especially ambiguous words, and about 50 tokens for average words in English. The size of my corpora, which I believe is sufficient for the purpose of the present study, goes beyond Sinclair's suggestion.

<sup>16</sup> A typical example is: y' know, the war, or when they were fightin' for food an' clothin' an houses. Their eyes light up as they tell y', because there was some meanin' to it. For such cases, I would check for correct spelling in written English and would present it as such: You know, the war, or when they were fighting for food and clothing and houses. Their eyes light up as they tell you, because there was some meaning to it. Only 10 tokens out of 500 were so broken and unidentifiable that I had to exclude them.

### 3.3 Procedures of sense decision and description

The procedures of modeling the semantic networks of up and shàng involved:

- 1) Identifying senses from the data, based on the Meaning Criterion;
- 2) Identifying the dependent predication and the autonomous predication in a symbolic combination that decides the semantic extension of *up*, under the principle of the conceptual unity of domain;
- 3) Discussing concept elaboration in terms of conceptual autonomy and dependency;
- 4) Determining the primary sense in the entire semantic network, based on the methodology in Evans (2004); and
- 5) Deciding how the senses should be networked together in relation to the primary sense.

## 3.4 Delimitations of the present study

The semantic context-dependency of up (especially the interaction of up and its co-text in VPCs) is my primary concern in this research; instances of up as a verb or in a compound will not be discussed. As for *shàng*, it will be studied to provide a comparison with up, with a view to discover the cognitive workings behind the semantic versatility of the cross-linguistic near-equivalents. Therefore, the scope of my study covers only [V] - [SHANG] as a counterpart of [V] - [UP]. In addition to that, since I look at how the interaction of up and its co-text co-contribute to representation at the conceptual level, I further narrow the scope down to an image-schematic analysis of *shàng* as a contrast. The metaphorical usages of *shàng* will not be discussed.

In the next chapter, I analyze the connection between the co-text of *up*, its meanings, and the image-schematic representation of the meanings.

## 4 THE CORE SENSES OF UP

In this chapter, I present the core usage clusters identified in the corpus in terms of their distinct patterns of grammatical profiling and concept elaboration. I introduce the distinct core senses in 4.1 and use the PP methodology to determine the sanctioning sense in 4.2. Section 4.3 is devoted to a discussion of the distinct grammatical patterning and concept elaboration of the core senses. As mentioned earlier, metaphor plays a critical role in the semantic network of up, which includes the meanings 'more', 'good', 'happy', and 'accessible'. These metaphorically derived senses are presented separately in Chapter 5.<sup>17</sup> In this chapter, I focus on meanings which do not involve conceptual metaphors as their mechanism of meaning extension.

#### 4.1 Core senses and the Meaning Criterion

In my corpus, I identified three core senses that do not involve cross-domain mapping, all presented below.

#### 4.1.1 'Vertically higher'

This cluster of usages demonstrates obvious spatial meaning. This cluster encodes a tr moving from a vertically lower position to a higher one, without specifying the endpoint of the motion. Instances (4–1) and (4–2) illustrate the existence of such a sense.

<sup>17</sup> A partial and much condensed version of the semantic analysis of *up* can be found in Lu (2016).
(4-1) I was able to soar up, to fly, I could rock in the air like that balloon.
(4-2) Stretch up gently for 10 counts.

In (4-1), the tr, *I*, goes vertically higher by means of *soar*. The endpoint of the trajectory is unspecified. For (4-2), what moves to a vertically higher position is a part of the addressee's body. Hearing the imperative, the addressee will try to extend a part of their body as the tr, along the vertical dimension. In these two examples, what is salient in the trajectory of the tr is the PATH, among the source-PATH-GOAL schema (Johnson 1987). The SOURCE or the GOAL of the trajectory is not specified, or not "profiled" in the CG sense. The above instances exhibit a distinct semantic characteristic, so they satisfy the Meaning Criterion of PP.

#### 4.1.2 'Approaching'

The second sense I identified is 'approaching.' This cluster of usages is used to describe the trajectory of a primary figure along a PATH as the tr approaches a reference point.

- (4-3) She swam in what she hoped was the direction of the stairs, only to come **up** against a wall.
- (4-4) They've got longer reach than us. To have a chance we have to get up close.
- (4-5) [Y]ou were not to look at your masters when they came **up** the drive, but to hoe on regardless.

In (4-3), the tr, *she*, travels along a PATH by means of swimming and approaches the reference point, *a wall*. In (4-4), the tr, *we*, moves along a path in order to get close to the reference point, *them*, which is not mentioned but inferable from context. *They* in (5) is the tr that performs a locomotion along the linguistically specified PATH, encoded as *the drive*. The reference point in (4-5) is again unspecified but can be inferred from context to be where the addressee is standing.

Various individual parts of the conceptual scene can be linguistically elaborated. In this cluster of uses, we can code the GOAL of the trajectory of the primary figure as in (4-3), the path as in (4-5), or neither as in (4-4).

The above instances carry an additional meaning which is different from the previous sense.

#### 4.1.3 'Completive'

The third sense that I identified in the corpus is 'completive.'<sup>18</sup> The semantic characteristic of this cluster of usages is that the use of up portrays a process that unfolds along the temporal axis until the process finally reaches a certain point where it can be considered complete in a loose sense. Instances (4–6) to (4–8) are typical:

- (4-6) The men have been locked up in their cells since day one of their imprisonment.
- (4-7) [T]he skull was taken from its tomb and split up among Fang families...
- (4-8) There's metal and circuitry mixed up in there.

The up in (4–6) is used to express that the process of locking the men in their cells by an unspecified agent reaches a boundary beyond which further development of the process is impossible. However, (4–7) and (4–8) are slightly different from (4–6). The process of locking in (4–6) has an inherent endpoint, which coincides with the moment when the key to the lock turns to its limit and brings the latch to a click. By contrast, in (4–7), the use of up denotes that the process of separating the tr, *the skull*, reaches an extent at which the pieces of the skull may subjectively count as being separated. By the same token, in (4–8) there is no inherent endpoint to the process of mixing, but it does seem to have a final state, though it is difficult to specify its nature.

Instances (4–6) to (4–8) show that 'completive' exhibits an additional meaning which is not found in the other two. This satisfies the Meaning Criterion, although the difference between (4–6) and the other two instances will be addressed with reference to the Concept Elaboration Criterion and the Grammatical Criterion.

#### 4.2 Decision of the sanctioning sense

Following the methodology of PP, after the identification of the meanings the next step is to identify the most basic one from which the others derive.

The first criterion of PP, which is the earliest attested meaning, refers to the historically earliest meaning as a likely candidate for the primary sense. The Oxford English Dictionary lists the sense 'vertically higher' as the earliest meaning, which makes it fit the first criterion. The second criterion of PP is the unique spatial

<sup>18</sup> One may doubt how 'completive' counts as a basic core sense, given the involvement of the conceptual domain of TIME in which the usage of 'completive' occurs. The reason I consider 'completive' to be a core sense is that the rise of 'completive' is not based on a direct cross-domain mapping between SPACE and TIME. Rather, 'completive' should be regarded as an extension from 'approaching', and the mechanism of semantic extension is in fact one of "subjectification" (Langacker 1990) instead of metaphor. The rationale of such classification will become self-evident in later chapters. Interested readers are referred to Lu (2017) for a similar argument.

configuration involved in most of the senses identified. For instance, Tyler and Evans (2003) argue that eight out of the fifteen senses of *over* clearly involve the tr being higher than the lm, hence the primary sense of *over* should also involve such a spatial configuration. Applying this criterion to up shows that 'vertically higher', 'approaching,' and many other metaphorical meanings involve a unique spatial configuration of the tr moving to a vertically higher location or being located higher than a lm. Therefore, according to the second criterion of PP, the primary sense should also exhibit such a spatio-configurational property. The third criterion concerns the naturalness of prediction, which suggests that the selection of the primary sense in a semantic network allows for the most natural meaning extensions of all the senses from the primary sense. Among the three meanings of up, I consider 'vertically higher' the most natural selection of the primary sense, since the image-schematic component associated with 'vertically higher' is immanent in those extensions, but not vice versa. The image-schematic component is also apparent in the metaphorical senses.

The fourth criterion of PP concerns the way the selection of the primary sense facilitates cognitive processing. In Cognitive Linguistics, semantic extension typically occurs from a concrete domain to an abstract one. Among the core senses of up, 'vertically higher' and 'approaching' are more concrete, so a selection of either of the two is more natural. However, some cases of 'approaching' can have a dual reading between 'approaching' and 'completive' in context, which we will come back to in 4.3. 'Vertically higher' is therefore a more likely candidate to meet the fourth criterion of the primary sense. In Table 1 below, 'vertically higher' receives a double circle that stands for its total fulfillment of this fourth criterion, while 'approaching' has a single circle that stands for its partial fulfillment of the criterion.

The fifth criterion of PP suggests that the prototypical sense is most closely related to our lived experience concerning that particular lexical item. For *up*, I consider 'vertically higher' and 'approaching' more closely related to our phenomenological experience, since the concept of SPACE is what human beings are most familiar with. Furthermore, as has been pointed out above, some instances of 'approaching' have a dual interpretation of 'completive' which goes beyond the spatial domain. The meaning therefore receives only a single circle in Table 1 below, indicating its partial fulfillment of this criterion.

Table 1 below summarizes the above discussion, where a double circle stands for full satisfaction of a particular criterion.

	'Vertically higher'	'Approaching'	'Completive'
Earliest attested meaning	0		
Predominance in the semantic network	0		
Predictability with reference to other senses	0		
Plausible cognitive antecedent	0	0	
Human phenomenological experience	0	0	

Table 1: Primary sense decision for up based on Evans' (2004) criteria

Evans (2004) also points out that the decision of the primary sense does not depend on any single criterion but on how each sense fits all the criteria in general. Following from that, 'vertically higher' best fits all the above criteria, so I consider that sense the most likely candidate for the primary sense, from which the other senses derive.

# 4.3 The core senses of *up* and their associated constructional schemas

In this section, I discuss the three core meanings of up in terms of their associated constructional schemas, which include their respective patterns of concept elaboration and grammatical behavior as mentioned above.

# 4.3.1 'Vertically higher' and its associated constructional schemas<sup>19</sup>

In my corpus, there are two important sub-groups of constructional schemas associated with 'vertically higher,' with one profiling only the PATH, and the other profiling both the PATH and either the SOURCE or the GOAL.<sup>20</sup> I present these two sub-groups in 4.3.1.1 and 4.3.1.2.<sup>21</sup>

<sup>19</sup> I use the following notation in formulating constructional schemas: NP for "noun phrase," ADVP for "adverbial phrase," and PREP for "prepositional phrase".

Although a usage event of up 'vertically higher' that profiles the SOURCE, the PATH and the GOAL at the same TIME is not impossible, such usage is not found in the corpus. The absence of such an intuitive possible usage reflects the fundamental difference between an intuition-based and a corpus-based approach to the study of language.

<sup>21</sup> Bear in mind that [V] – [UP], as a schematic representation, is simply an abstracted commonality among a group of real occurring usage events. This constructional schema can certainly be elab-

#### 4.3.1.1 Constructional schemas of 'vertically higher' that profile exclusively PATH

An observation of authentic corpus data reveals the association of up 'vertically higher' with constructional schemas which conceptually profile PATH exclusively as its prototypical characteristic. These constructional schemas include, but are not limited to, the following: [V] – [UP] and [ADVP] – [UP].<sup>22</sup>

The first constructional schema which profiles PATH is [V] - [UP]; it is instantiated by (4–1), repeated here as (4–9), and another example (4–10).

(4-9) I was able to soar up, to fly, I could rock in the air like that balloon.

(4–10) Practice had made perfect: she hardly made a sound. Peter slept on. Rung by rung, she crept **up** the ladder.

In (4-9), the tr *I*, by means of soaring, moves along an upward trajectory which is encoded by *up*. In (4-10), the tr of *up*, *she*, is engaged in vertical motion by creeping upward along an upright object elaborated by *the ladder*.

The meaning of 'vertically higher' does not occur exclusively in constructions that contain a verb. It may also occur in the constructional schema of [ADVP] - [UP] where *up* follows another adverbial phrase, as in (4–11).

# (4–11) Two-thirds of the way **up**, she paused to get her breath back before lifting the heavy hatch and sliding it away from the opening...<sup>23</sup>

In (4–11), the entity which follows a vertical trajectory, i.e. the tr of up, is not provided by the first adverbial phrase nor by any of the arguments of up. The tr of up corresponds to the clausal tr that follows, i.e. *she*. In this excerpt, what is prominent is the PATH along which the tr moves, especially its length, which is linguistically elaborated by *two-thirds of the way*.

The conceptual representation of the above examples is the profiling of PATH, which leaves SOURCE and GOAL in the "maximal scope" (Langacker 1987) in the

orated using more specific schemas, but I will not go into these details due to space limitations. Note in addition that the sub-schemas of [V] – [UP] which involve either the Interactive Focus (Lindner 1983), a deictic noun, or a prepositional phrase profile not only the PATH but also the GOAL, and will therefore be discussed in section 4.3.1.2.

<sup>22</sup> The list of schemas presented here is not meant to be exhaustive but is only generalized from a corpus of a particular size. I do not exclude the possibility of finding additional constructional schemas given a larger corpus.

Another possibility is to analyze the first ADVP in (4–11), *two-thirds of the way*, as an NP, which would result in an alternative constructional schema [NP] – [UP]. Either way, what this usage cluster reveals is the potential non-verbal nature of the source of the concept elaboration. In addition to the phrase *two-thirds of the way*, what typically precedes *up* in this schema may include *half-way*, *all the way*, and the like.



**Figure 4.1:** The image-schematic structure of the constructional schemas that profile exclusively PATH for 'vertically higher'

general locus of attention, since the two ends of the profiled trajectory do not matter much.<sup>24</sup> The imagistic configuration is schematized as Figure 4.1, where the circles stand for the SOURCE and the GOAL and the arrow in the middle for the PATH. The part in bold is in the profile.<sup>25</sup>

Below, I turn to the other group of constructional schemas that profile not only PATH but also either GOAL OF SOURCE.

# 4.3.1.2 Constructional schemas of 'vertically higher' that profile PATH and either GOAL or SOURCE

In addition to constructional schemas that profile exclusively PATH, I identified a set of constructional schemas that profile both PATH and GOAL. These GOAL-prominent<sup>26</sup> schemas include, but are not limited to, the following: [V] – [UP] that involves Interactive Focus; [V] – [UP] that involves a deictic noun; and [V] – [UP] – [PREPP]. Examples (4–12), (4–13) and (4–14) are illustrations of these three schemas.

(4-12) ... projects ranged from rock hauling, taking rocks out of the creek, picking them **up**, hauling them up the hill, putting them in a pile.

The two constructional schemas discussed above can be elaborated using a variety of local schemas with different levels of specificity, which are in turn imminent in real occurring usage events. For instance, (4-10) can alternatively be schematized as [V] - [UP] - [NP], which can be seen also as an elaboration of [V] - [UP]. However, a presentation of constructional schemas of such an intermediate level of specificity is not relevant enough to the semantic grouping of the usage events to be included in my analysis.

The figures are numbered according to the chapters they appear in, such as Figure 4.1, 4.2 (if they appear in Chapter 4), 5.1, 5.2 (if they appear in Chapter 5), etc.

<sup>26</sup> Lindner (1983) uses GOAL-oriented to refer to image-schematic structures of up which profile the PATH and the GOAL.

(4-13) You want to look up there. Can you pick the arms that you like the best?

(4–14) Millie burst out laughing, and as Ben pulled himself **up** on to the cart, she said, 'You know, you are funny, the things you say.'

In (4–12), the tr of up, rocks, reaches a vertically higher position, i.e. the endpoint of its trajectory, via someone taking and carrying the rocks.<sup>27</sup> Here the trajectory of up is confined to certain region referred to by Lindner (1983: 162ff) as "Interactive Focus", i.e. the "level of activity" or "hand level", which is associated with the notion of use, possession and activity.<sup>28</sup> Although the endpoint of the trajectory is not linguistically elaborated, it plays an important role in the meaning of examples like (4–12). In (4–13), the tr of up is not identical with the tr of *look*, viz. *you*, but is instead the perpetual focus of the experiencer who is looking. The perceptual focus is also a fictive agent that can be construed to move along a vertical trajectory to the endpoint of the path, coded by the deictic noun *there* to indicate the endpoint being away from the speaker. In (4–14), the tr of up corresponds to the lm of the verb *pull*, which follows a vertical trajectory and finishes in a spatial relation with respect to a noun phrase, which is formally elaborated by *on to the cart*.

In this group of usage events, GOAL is also highlighted against the conceptual base. The image-schematic structure of this type of usage events is presented as Figure 4.2, with the profiled PATH and GOAL in bold.

In addition to GOAL, SOURCE is the other possibility that can be profiled along with PATH. (4–15) illustrates this possibility:

# (4–15) The smiling ticket agent who has been processing my ticket suddenly looks **up** from her computer screen and tells me the bad news.

In (4–15), the tr of up is again different from the tr of the verb, and is a fictive entity that departs from a location and moves in space following an upward trajectory. But in contrast to the previous cluster, the SOURCE of its trajectory stands out from the conceptual base, since the SOURCE is linguistically elaborated as a PREPP led by *from*. This SOURCE-prominent subtype of the [V] – [UP] – [PREPP] can be image-schematically depicted as Figure 4.3, with the profiled PATH and SOURCE in bold.

Note that the tr of up in (4–12) is *them*, which corresponds to the lm of *pick*. Such discrepancy can be witnessed in VPCs that involve a direct object, where the tr-lm relationship is different for the verb and the particle, as Langacker (2008: 404) has pointed out. Some VPCs without a direct object may exhibit such discrepancy too. Typical examples include *throw up*, *cough up*, and so on.

The notion of Lindner's (1983) Interactive Focus does relate to a few metaphorical meanings of *up*, such as 'accessible' or 'good'. But the focus of this chapter are the meanings that do not involve metaphorical extension, so the figuratively extended meanings associated with the implicit endpoint of the trajectory which involve the concept of Interactive Focus are studied in Chapter 5.



**Figure 4.2:** The image-schematic structure of constructional schemas that profile not only PATH but also GOAL for 'vertically higher'



Figure 4.3: The image-schematic structure of usage events that profile not only PATH but also SOURCE for 'vertically higher'

I have so far presented three types of constructional schemas, each with its own distinct image-schematic representation. These demonstrate two commonalities of *up* 'vertically higher'. First of all, the verb that precedes *up* needs to be instantiated in the conceptual domain of SPACE, although it does not have to be a typical action verb. In addition to that, the part of PATH in the SOURCE-PATH-GOAL schema is always prominent for 'vertically higher', while the SOURCE or the GOAL can selectively receive linguistic elaboration depending on the type of constructional schema at play. In the majority of cases, GOAL is profiled along with PATH and may or may not be encoded, while the profiling of SOURCE is less frequent.

The imagistic commonality among these constructional schemas can be generalized as Figure 4.4 below. The exclusive profiling of PATH renders the arrow in bold, whereas SOURCE and GOAL may be optionally profiled so are represented only in dotted circles.



Figure 4.4: The general image-schematic structure of 'vertically higher'

Below, I turn to 'approaching', the second major group of usage meaning I identified in the corpus.

## 4.3.2 'Approaching' and its associated constructional schemas

The second semantic cluster I found in the corpus is the meaning of 'approaching' for *up*, which portrays one entity moving in the direction of, and as a result getting close to, another, with the path of motion not necessarily being vertical.<sup>29</sup> The meaning of this cluster of usage is still concrete in the sense that 'approaching' is still construed against the domain of SPACE. However, although the meaning remains physical, the sense of verticality is not as strong as in 'vertically higher'. In my corpus, I identified three sub-types of constructional schemas associated with 'approaching': schemas that profile PATH and a specific concrete GOAL; schemas that profile PATH and an implicit GOAL; and schemas that profile only an implicit GOAL. These constructional schemas also share distinct commonalities in terms of concept elaboration.

# 4.3.2.1 Constructional schemas of 'approaching' that profile PATH and a concrete goal

In the corpus, the first constructional schema associated with up 'approaching' is [V] - [UP] - [PREPP]. This cluster of usage involves a construal of an entity of primary focus moving toward the direction and as a consequence getting close to the entity of secondary focus. Excerpts (4–16) and (4–17) typify this schema:

Though not explicitly indicating this, Hawkins (1984: 389) seems to suggest that a usage of *up*, as in *They trotted up the path*, operates on the horizontal plane. But as will be shown later, this observation might not hold. I consider this cluster of usage to involve only a less strict vertical sense.

(4-16) Behrens kept up with the fleeing lovers...<sup>30</sup>
(4-17) The Doctor set off <u>down the slope</u>. Francis caught up with him.

In (4–16), the tr, *Behrens*, follows a non-vertical trajectory toward the direction of the lm, *the fleeing lovers*, in order to overtake the lm. In (4–17), the tr, *Francis*, travels along a path fast enough to be able to get close to the lm, *him*, which refers back to *the Doctor*. In both cases, the lm is the endpoint of the tr's path of motion.

The tr-lm relation in (4–16) and (4–17) look quite straightforward at first glance, but a closer look reveals that none of the trajectories in (4–16) and (4–17) are upward, as we saw in the first cluster. Specifically, the path of motion in (4–16) seems to be horizontal, and the path in (4–17) is even slightly downward. This semantic inconsistency leads to the question: Why would the use of up be sanctioned in usage events in which the actual trajectory in space may not be vertically upward?

Previous studies such as Lakoff and Johnson (1980) and Lindner (1983) have provided an answer to the polysemy of up in terms of experiential motivation. They argue that up obtains the meaning of 'approaching' given the experiential correlation that a person looks taller as he approaches the viewer.

However, I propose a conceptual alternative, which is the involvement of an "onstage conceptualizer" (Langacker 1991), whose location is identified with that of the lm. In (4–16), the location of the onstage conceptualizer is identical with *the fleeing lovers*. As the tr, *Behrens*, tries to overtake the lm by approaching it, the tr would appear vertically higher only if observed from the lm's point of view. The same applies to (4–17). Even if the tr and the lm both travel downward along a slope, the tr, *Francis*, would still appear vertically higher in the eye of the onstage conceptualizer as the tr approaches the lm (*the Doctor*). Therefore, what matters in this usage event is not the objective vertical dimension, but what is perceived from the perspective of the onstage conceptualizer, which is reflected by the use of up.<sup>31</sup> In other words, the upward image schema is still immanent from the viewpoint of the onstage conceptualizer rather than an offstage and objective observer.

This difference in perspective constitutes a case of "subjectification" (Langacker 1990, 1999), which I will come back to in Chapter 7.

Based on the crucial status of PATH and GOAL in this sub-schema, the image-schematic representation of [V] – [UP] – [PREPP] is shown in Figure 4.5. The path

A phrasal verb constructional schema [V] - [UP] - [WITH], instantiated by *catch up with, keep up with,* etc., occurs with 'approaching' but not 'vertically higher' or 'completive', which can be seen as a distinct characteristic of this particular semantic cluster.

<sup>31</sup> My explanation is in line with the observation in Bolinger (1971: 98–9) that the use of up is associated with the reduction of distance between the viewer and what is viewed, while the opposite holds for *down*. However, the author did not mention the experiential basis that motivates the meaning of 'approaching' from the literal meaning of up.

#### 4 The Core Senses of Up

Figure 4.5: The image-schematic representation of the constructional schema that profiles PATH and a concrete GOAL for 'approaching'

is in profile, since the sense of motion is still strong. The endpoint of the path also stands out from the background given the presence of the onstage conceptualizer and the fact that the endpoint is spelled out by the PREPP. Both the path and the goal are represented in bold to show their conceptual prominence. The dashed arrow represents a loss of the sense of verticality, since the upward trajectory is still immanent, although only from the perspective of the onstage conceptualizer.

Below, I turn to another cluster of constructional schemas associated with 'approaching'.

### 4.3.2.2 Constructional schemas of 'approaching' that profile PATH and an implicit GOAL

In my corpus, I found two constructional schemas of 'approaching' that profile an implicit GOAL in addition to PATH, [V] - [UP] - [NP] and [ADVP] - [UP] - [NP]. What characterizes these schemas is the emphasis on the tr's path of motion and, more importantly, an implicit onstage point of view. Instance (4–18) elaborates the first constructional schema, [V] - [UP] - [NP]:

# (4-18) [Y]ou were not to look at your masters when they came **up** the drive, but to hoe on regardless.

In (4–18), the tr of *came* and of up coincide and both refer to *they*, which follows a non-vertical trajectory linguistically specified as the lm, elaborated as *the drive*. At first glance, it may seem that only the PATH portion sticks out from the conceptual base, given the fact that the use of both up and *the drive* linguistically elaborates the path of motion. However, as I have argued, the use of up in this cluster does not encode verticality in a purely objective sense, but only involves



Figure 4.6: The image-schematic representation for constructional schemas of 'approaching' that profile the path and an implicit goal

a sense of verticality from the perspective of an onstage conceptualizer. In (4-18), the onstage conceptualizer is located at the end of the path away from the tr, and as the tr follows the linguistically elaborated path, the top of the tr becomes vertically higher in the eye of the onstage conceptualizer.

The other constructional schema that profiles PATH and an implicit GOAL is [ADVP] – [UP] – [NP].<sup>32</sup> (4–19) is a typical example of this constructional schema:

(4–19) Further along the road there's another gate. You'll come across the house half- way **up** the drive.

In (4–19), the tr of *up*, *you*, corresponds to the tr of the main verb. The primary figure moves along a non-vertical path, which is linguistically elaborated by an NP that follows, *the drive*. Quite similar to (4–18), what lies at the end of the path does not receive linguistic realization but is still conceptually prominent, since the use of *up* does not convey a sense of verticality that can be objectively observed. Instead, the upward trajectory of the moving entity is observable only from the onstage vantage point, which is located at the end of the path. Therefore, what lies in profile is the path and the implicit goal, also as the onstage vantage point, although GOAL is not linguistically elaborated.<sup>33</sup> Figure 4.6 shows the common imagistic representation of the constructional schemas [V] – [UP] – [NP] and [ADVP] – [UP] – [NP], which both involve a non-vertical path.

Below, I introduce a constructional schema of 'approaching' which involves only an implicit goal.

A non-verbal PATH-prominent constructional schema of [ADVP] – [UP] is also associated with 'vertically higher'. Although the two schemas are structurally similar, the noun that occurs in the adverbial phrase in the two schemas is different—The nouns that linguistically elaborate the PATH in 'vertically higher' involve a salient vertical property, unlike in 'approaching'.

The observation on this infrequent usage cluster corresponds to my previous disclaimer at the end of section 4.3.1. The schema [ADVP] – [UP] may have more specific instantiations such as [ADVP] – [UP] – [NP] given a larger corpus.

### 4.3.2.3 Constructional schemas of 'approaching' that profiles only an implicit goal

In the corpus, I identified a constructional schema for up 'approaching' which profiles an implicit goal and in which the involvement of PATH is weaker in comparison to the previous constructional schemas. This cluster of usages, schematized as [V] - [UP], involves a primary figure reaching the end of a trajectory. (4–20) and (4–21) are typical of this schema.

(4–20) The Doctor turned and strode downhill, and once again Francis had to run to catch up. (4–21) [W]e need to let him know where to meet up in Lincoln's Inn Fields.

In (4–20), the tr of up, which corresponds to that of run and catch, attempts to overtake the unspecified but inferable lm, which is *the Doctor*.<sup>34</sup> The entity that is overtaken, *the Doctor*, although linguistically unspecified, is conceptually the secondary figure reached by the primary figure, encoded as *Francis*. The use of up also signals the role played by *the Doctor* not only as the lm of the conceptual scene but also as the locus of the onstage vantage point from which Francis appears vertically higher as he approaches. Excerpt (4–21) similarly involves an entity which serves as the tr both of *meet* and of up, *he*, and is expected to encounter the unmentioned but understood secondary figure, which is the speaker. The unspecified goal is also conceptually salient, as it is both where the lm and the onstage conceptualizer resides.

Another two instances illustrate the conceptual saliency of the unspecified lm's and their critical role in the usage of 'approaching' in [V] - [UP] can be seen in (4–22) and (4–23). They are paraphrases of (4–20) and (4–21) based on [V] - [UP] - [PREPP], where the goal is linguistically elaborated.

- (4–22) The Doctor turned and strode downhill, and once again Francis had to run to catch **up** with him. (Constructed)
- (4–23) We need to let him know where to meet **up** with us in Lincoln's Inn Fields. (Constructed)

A comparison of (4-20) and (4-21) with their constructed counterparts shows that the only difference is whether or not the lm of up and the preceding verb are linguistically specified. It also shows that [V] - [UP] associated with 'approaching' can be analyzed as a "minimized" (Levinson 2000) version of [V] - [UP] - [PREPP], with the PREPP of the latter being reduced. However, the reason the

<sup>34</sup> Instances that belong to this cluster, such as (4–20) and (4–21), may take on dual interpretations. Here, I discuss the more concrete interpretation and will return to the other interpretation later in this section.

Im of up in (4–22) and (4–23) can be reduced is communication-oriented. The Im of up in this schema, i.e. *the Doctor* in (4–22) and us/we in (4–23), appeared earlier in the text and so is close enough to remain active (Chafe 1994) in the discourse participants' short-term memory. Given the fact that the entity has been mentioned and is still easily recoverable by the hearer/reader, it makes sense for the speaker/writer to omit specific reference to it in discourse, which reduces [V] - [UP] - [PREPP] to the ellipted version.

So far, I have discussed how [V] – [UP] can be viewed as a minimized version of [V] - [UP] - [PREPP], and how these two constructional schemas are conceptually similar and related via the information status of referents in discourse. Based on this similarity, the former can also be viewed on a par with the latter in terms of the imagistic content, since for [V] - [UP], PATH and GOAL also stand out from the conceptual background and receive more attention. However, as I mentioned earlier in this section, [V] - [UP] can receive another possible interpretation in addition to the reading of 'approaching'. If we compare (4-20) and (4-21) with their counterparts, it is noticeable that the sentences that instantiate [V] – [UP] - [PREPP] involve a more concrete sense than their ellipted counterparts.<sup>35</sup> The instances of [V] - [UP] - [PREPP] are more easily interpreted to occur in the domain of SPACE because the GOAL of the motion is spelled out as a source of contextual influence. In contrast, an omission of the physical goal opens up the possibility of the usage event being instantiated in a domain other than that of SPACE. But such an explanation begs the question: if not SPACE, then against what conceptual domain would (4-20) and (4-21) be interpreted?

As the sense of physical motion attenuates, what remains is the processual and temporal sense associated with the verb. In a telic event where the endpoint of a path is reached, the attenuation of the sense of physical motion leaves behind an interpretation that the approaching process is complete. As a result, the minimization of the PREPP in the [V] - [UP] - [PREPP] pattern gives rise to the dual interpretations of the resultant [V] - [UP]. As the temporal interpretation associated with the resultant schema becomes more 'entrenched' (Langacker 2000) through repeated use, the meaning of 'completive' may come to stand alone as a distinct sense. In addition to being an intermediate stage between 'approaching' and 'completive', the attenuation of physical sense is also symptomatic of subjectification, which I will return to in Chapter 7. Accordingly, in Figure 4.7, the attenuation of the physical sense in [V] - [UP] is represented by a broken line in shorter dashes. All the other elements remain identical to its concrete counterpart in Figure 4.5.

<sup>35</sup> The comparison between the two clusters of usage can also be addressed in terms of conceptual autonomy and dependence, which I will come back to in Chapter 5. I will explore how conceptual autonomy and dependence offers a clue to an analysis of such contextual influence.



Figure 4.7: The image-schematic representation for 'approaching' in [V] – [UP] with an attenuated physical sense

#### 4.3.2.4 Interim summary for 'approaching'36

In 4.3.2, I introduced three constructional schemas associated with 'approaching' for up. A distinct commonality among the three constructional schemas is the involvement of an onstage conceptualizer. The onstage conceptualizer is crucial to the development of the sense since the use of up does not encode an upward motion in an objective physical sense, but instead reflects what is perceived from the onstage conceptualizer's perspective. The involvement of the onstage vantage point results in the loss of vertical sense, so the actual trajectory of the moving figure in space does not have to be vertically upward, but can be horizontal and in some cases even downward.

In addition, I discussed the dual readings of [V] - [UP] between 'approaching' and 'completive'. As the GOAL-specifying PREPP is minimized in [V] - [UP] - [PREPP], the sense of physical motion attenuates, and that triggers a gradual shift from the domain of SPACE. Therefore, 'completive' can be viewed as an extension from 'approaching'. Below, I turn to 'completive'.

## 4.3.3 'Completive' in [V] - [UP] and its sources of concept elaboration

In 4.3.2, I argued that the meaning of 'completive' is a development from 'approaching'. In this section, I follow up on the argument and consolidate it. Consider an additional instance from the corpus that contains the phrase *catch up*:

(4–24) [She] now walked towards the hoverspeeder very slowly, as if waiting for Defries to catch her **up** before she reached it.

<sup>36</sup> One might expect an additional schema of [V] - [UP] - [PREP] that might profile the SOURCE, in addition to the GOAL-prominent constructional schema instantiated by (4–16) or (4–17). However, such instance was not found in my corpus.

Compared to the previous instances that contain *catch up*, (4-24) seems to have a stronger reading of 'completive', i.e. with a weaker sense of physical motion. The transitive use of *catch up* and the insertion of the direct object *her* in between signals the telic nature of this particular usage event.<sup>37</sup> Below, I introduce four local patterns of concept elaboration that are associated with *up* 'completive' that I found in the corpus.

#### 4.3.3.1 The verb as the source of concept elaboration for 'completive'

The data reveals that the constructional schema [V] – [UP] is not a monolithic whole. In particular, there are four interesting sub-clusters that elaborate this particular schema, and each sub-cluster has its own distinct source of concept elaboration for 'completive'. Below, I first cover the usage cluster that involves a process with an intrinsic endpoint prompted by the verb. This cluster of usage includes, but is not limited to, the following types of processes: joining; closing; depleting; and filling.<sup>38</sup> This list is not exhaustive, and we could expect to encounter a wider variety of processes with a larger corpus. This list merely serves to illustrate the nature of concept elaboration with some sample processes that may fit into this particular group of usage events.

As stated before, 'completive' should be considered an extension from 'approaching' based on the conceptual similarity between the senses. Specifically, at least two clusters of usage, the processes of joining and closing, may be considered to relate to 'approaching', and as such may serve as the "bridging context" (Heine 2002) for the extension from 'approaching' to 'completive.' Instances (4–24) above and (4–25) below are typical of joining processes, and (4–26) is a typical closing process.

- (4–25) Now he'll come up with all sorts of bright ideas like tying me **up** or pumping me full of tranquillizers for my own safety.
- (4-26) The smell is so terrible you want to throw up. The men have been locked **up** in their cells since day one of their imprisonment.

(4–24) has a dual reading of 'approaching' and 'completive'. In this case, the tr of *catch*, *Defries*, travels along a path toward the lm, *her*, until the endpoint of the path; meanwhile, the endpoint of the process of joining coded by the verb

<sup>37</sup> See Bolinger (1971: 38) for a similar observation, where the author compares different orderings of elements of phrasal verbs such as *ponder over N/ponder N over*, *get over N/get N over* and *see through N/see N through* in terms of transitivity.

Filling processes will be addressed in detail when I discuss the possible connection between 'more' and 'completive' in Chapter 5.

**Figure 4.8:** The image-schematic representation of 'completive' for [V] – [UP] which depends on the verb for concept elaboration

*catch* is achieved so that the tr gets to meet the lm. As for (4-25), the event of tying can be understood as a process of joining two ropes together. By making the end of the ropes fastened to each other, the process of joining is complete. Similarly, at a highly abstract level, an event of closing relates to the meaning of 'approaching'. The event of locking someone up in (4-26) involves putting the prisoner into a cell, i.e. closing the gate by making the gate approach and fit into the frame.

I describe these instances to illustrate the abstract conceptual commonality between the processes of joining and closing. Both joining and closing processes have an intrinsic endpoint, which is reached at the precise moment when the tr comes into contact with the lm in a joining event, and when the only open side of the container comes into contact with the rest of the container in a closing event. Based on the above explanation of a schematic tr meeting the lm as the resultant state, a conceptual similarity between the processes of joining and closing with the meaning of 'approaching' leads to an abstracted imagistic representation as Figure 4.8.

Compared to Figure 4.7, GOAL in Figure 4.8 remains in profile, since the final state of the events of joining and closing, i.e. the intrinsic endpoint of the processes, needs to be prominent in order for the event to be categorized as 'completive'. Therefore, the conceptual representation of 'completive' which depends on the verb for concept elaboration is topologically similar to that of [V] - [UP] for 'approaching', with GOAL in this sub-cluster of 'completive' specified by the verb. The only difference between Figure 4.8 and 4.7 is the sense of physical motion having further faded away, though still being traceable, hence the dotted line.

In addition to the further attenuation of sense of physical motion, the issue of dual interpretations is worth an in-depth discussion with regard to the semantic extension from 'approaching' to 'completive', which I address below.

As I mentioned, though this is not a preferable reading, (4-25) and (4-26) could be interpreted as instantiating in the conceptual domain of SPACE, so they could still be categorized as peripheral members of 'approaching'. In contrast, an event of depletion, as in (4-27) below, is another typical instance of 'completive', which does not invoke a sense of physical motion.

(4–27) Many an adult struggles with their weight because of being persuaded to 'eat **up**' as a child. In our minds 'eating everything that is placed in front of us' is associated with...

The process of EAT in (4-27) is another typical one that also involves an intrinsic endpoint. It is certainly possible to keep eating non-stop, but to eat something up involves consuming a certain amount of food, which in this case is linguistically elaborated as *everything that is placed in front of us*. Compared with (4-25)and (4-26), (4-27) does not have any sense of physical motion, which makes it possible to relate this particular instance to 'approaching'. This instance, among many others, can be considered a prototypical instance of 'completive'.<sup>39</sup>

The examples I have presented so far form a semantic continuum between 'approaching' and 'completive'. The instance of a tr catching up with a lm is typical of the meaning of 'approaching'. As one moves from the instance of the tr catch up to an event where the tr catch the lm up, one becomes less certain about the 'goodness' of the instance as a member of the semantic category of 'approaching'. The feeling of uncertainty is accompanied by the rise of an alternative reading of 'completive'. When we compare the instance of the tr catch the lm up with that of the tr lock the lm up, the sense of approaching is hardly present, and the instance starts to look like a "better" member of the semantic category of 'completive'. Beyond this point, no sense of physical motion exists at all, and the case in which the tr eat up the lm, among many others, belongs to the core of the 'completive' cluster. Such a continuum of semantic overlap along the route of meaning extension is shown in Figure 4.9, where the solid arrows  $(A \rightarrow B)$  stand for a relation of instantiation and schematization (A is schematic of B, and B is an instantiation of A), and the dotted arrows for a categorizing relation (D is an extension from C). The solidity of the arrows represents the strength of the relation.

Below, I turn to another cluster of usage, where an NP in the co-text of *up* serves as the source of concept elaboration for 'completive'.

Note that the verb in this sub-cluster of [V] - [UP] meaning 'completive' does not exclude BE verbs. Instances such as *The time is up, Twenty minutes is up, The game is up*, etc., all belong to this sub-cluster, where the endpoint of the process is determined by the amount of time specified in the co-text.



Figure 4.9: The semantic gradation between 'approaching' and 'completive'

#### 4.3.3.2 A noun phrase as the source of concept elaboration for 'completive'

In addition to the verb, [V] - [UP] associated with 'completive' may also depend on a noun phrase (hereafter NP) in the co-text of up for concept elaboration. (4-27) above and (4-28) below illustrate the concept elaboration that depends on an NP in the co-text of up.

(4–28) [W]hen they decay and the bacteria decompose them, they use **up** all the oxygen in the water.

Compared to (4-25) and (4-26), the process of EAT in (4-27) and USE in (4-28) does not guarantee an intrinsic endpoint. The non-perfective nature of EAT can be illustrated by (4-29):

(4-29) What would happen if you didn't drink enough milk and you didn't get enough calcium and your bones didn't grow but you kept **eating** lots of protein?

In (4–29), the fact that EAT does not have an intrinsic endpoint becomes self-explanatory as it takes on the form of a gerund, following the verb *keep*. Therefore, since the verb *eat* does not invoke an intrinsic endpoint, the concept elaboration of 'completive' in the combination of *eat up* does not lie in the verb.

A comparison of (4-27) and (4-29) reveals that what essentially concerns the telicity of an eating process is not the matrix verb *eat* but also the object argument of it. In (4-29), the direct object of *eat*, which is *lots of protein*, does not conceptually prompt a definite amount of food consumed that would pose a final boundary to the entire process. In other words, an indefinite direct object as such may influence the telicity of the event (Hopper and Thompson 1980). In con-

trast, the direct object in (4-27), everything that is placed in front of us, is specific enough to impose an endpoint to EAT.<sup>40</sup>

The above discussion shows that the concept elaboration of up meaning 'completive' may not only depend on the verb, but may also be triggered by an NP in the co-text of up.<sup>41</sup> The endpoint-salient property associated with these NPs represents a GOAL-prominent image-schematic representation identical to Figure 4.8.

In my corpus, I found that a PREPP that follows *up* may also be the source of concept elaboration; I will discuss this below.

#### 4.3.3.3 A prepositional phrase as the source of concept elaboration for 'completive'

A third source of concept elaboration for 'completive' is the PREPP that follows up. With the addition of a PREPP, the resultant schema looks similar to the GOAL-prominent schemas [V] – [UP] – [PREPP], which we saw in 4.3.1 and 4.3.2. However, the cluster of usage that I cover below does not involve a sense of physical motion. Instances (4–30) and (4–31) are typical.<sup>42</sup>

- (4-30) In the first extract, (12), one piece of continuous conversational discourse has been divided **up** into [chunks].
- (4-31) More frequently work in different media is split up into specialist studies, so that although there are general studies of Gauguin's work, there are also specialist monographs on his prints...

(4–30) and (4–31) are similar in the sense that they both involve a process of decomposition coded by a verb, and the endpoint of the decomposing process is linguistically elaborated by a PREPP led by the preposition *into* that follows *up*.<sup>43</sup> In (4–30), the endpoint of the process is for the tr, *one piece of continuous conversational discourse*, to split and become smaller chunks. In (4–31), the final state is for the tr, *work in different media*, to break down into smaller branches of studies. In

<sup>40</sup> One might question the definiteness of the object argument in (4-27). But comparing (4-29) with a constructed instance *They ate up the pizza*, where the direct object is both specific and definite, clearly shows that the concept elaboration of 'completive' in this cluster has everything to do with the property of the direct object.

<sup>41</sup> As I have shown, the 'completive' meaning of *up* can be prompted by the definiteness of an NP in its co-text. This point will become more obvious in Chapter 5.

Both the instances presented here happen to be a process of decomposition. This is not to claim that this cluster of usage contains only processes of decomposition. I expect to find other types of processes that rely on a following PREP for concept elaboration for up 'completive'.

<sup>43</sup> The prepositions that occur in [V] - [UP] - [PREP] for 'completive' may contain *in, into* and *to*. This clustering may have to do with the semantics of these prepositions, but I will not go into the details due to space limitations.

this cluster of usage, the endpoint is highly salient, since it is linguistically specified by a PREPP. Similar to what we saw in 4.3.3.2, this endpoint-salient cluster of usage also has an imagistic structure identical to Figure 4.8.

The usage clusters of *up* meaning 'completive' that I have analyzed so far are all processes with specific endpoints, and the endpoint of these processes can be imposed by either a verb, an NP, or a PREP. Since these processes have specific endpoints, the reading of 'completive' is straightforward, and that makes these usage events prototypical of 'completive'. Below, I turn to another cluster of usage of 'completive' that does not have a specific endpoint.

#### 4.3.3.4 Underspecified but inferable endpoints

Among the verbal processes that are involved in up 'completive', some processes have a highly salient endpoint, whereas others do not. For instance, the events of tying and locking are typical members of the former category. In contrast, there are other verbs that do not have a salient endpoint, and so they are not the source of concept elaboration. For this latter category, the specification of endpoint lies with some other elements in the co-text, such as a PREPP that follows up or an NP in the co-text.<sup>44</sup> However, it is also possible for verbs without an inherent endpoint to appear in the [V] – [UP] construction without an NP or a following PREPP that indicates the endpoint of the process. The PREPP in (4–30) and (4–31) that encodes the final state of the decomposition process, for instance, does not have to be present; this is instantiated in the paraphrases (4–32) and (4–33):

- (4-32) In the first extract, (12), one piece of continuous conversational discourse has been divided **up**. (Constructed)
- (4-33) More frequently work in different media is split **up**, so that although there are general studies of Gauguin's work, there are also specialist monographs on his prints... (Constructed)

If we compare (4-32) and (4-33) with typical punctual events like (4-25) and (4-26), we see that such processes of decomposition may not have a specific endpoint, since one can break an entity down into two, or four, ad infinitum. For such verbs of decomposition, there is no definite answer as to how "broken down" an entity must be to count as "completive" of the process. It is therefore natural

Some of these processes correspond to achievement verbs, which take place immediately, and others may correspond to accomplishment verbs, which imply an endpoint and focus on the duration of the event (Vendler 1957). For instance, *lock* and *spilt* are typical examples of the former category, while *eat* belongs to the second type.

for a decomposition process to accommodate an NP or a PREPP to linguistically elaborate the details of the resultant state, as in (4–27), (4–28), (4–30) and (4–31).

However, this does not mean that GOAL plays no role or only a minor role in the construal of sentences like (4-32) and (4-33). Although examples like (4-32) and (4-33) do not linguistically elaborate its endpoint of the process, the endpoint remains indispensable on the conceptual level. Citing McIntyre (2003), Cappelle (2005) argues that the endpoint of instances such as (4-32) and (4-33) is underspecified but contextually defined.<sup>45</sup> The author also proposes that up should be understood as a resultative particle which defines a result that an event may produce. Cappelle's view that the aspectual up should be treated as a resultative particle corresponds to the image-schematic representation that I depicted as Figure 4.8.

Based on Cappelle's proposal, the meaning of VPCs such as *divide up* and *split up* can be understood to involve an entity becoming smaller components as a result, but the result does not have to be specified. This phenomenon is due to the low "relevance" (Sperber and Wilson 1986) of the fine-grained details of the decomposition process to the communicative task at hand. For (4-32) and (4-33), what is construed as relevant is only the entity being in smaller pieces, but the detail of how small the pieces are does not concern the speaker. Therefore, only the relevant information, i.e. the decomposed entity being small enough, is cognitively important enough to be profiled.

The above idea applies not just to processes of decomposition, but to other processes that do not contain an inherent endpoint, which are abundant in the corpus. Instances (4-34) to (4-36) below are representative:

(4-34) It speaks of the separation of races, and of a world which mixes them up.
(4-35) [H]e is, perhaps, physically beaten up.
(4-36) If I foul up now, they'll all laugh and say Easy Rider was a fluke.

In (4-34), the process of mixing races together does not involve an inherent endpoint, as it is hard to tell how "together" races have to be in order for one to call the process of MIX "completed". What matters in this particular instance is the result of races being *sufficiently* mixed-together. The beating incident in (4-35) similarly does not have an inherent endpoint—no one knows how many punches one has to receive, or how bruised one needs to get, in order to be called "beaten up". (4-36) is similar, in the sense that there is no inherent indicator as to how awkwardly one needs to behave that would entitle the person to be understood as "fouling up". The speaker may subjectively call himself "fouled up" merely because he meets or fails certain expectations. Therefore, none of

<sup>45</sup> In Cappelle (2005), this usage cluster of *up* is termed "aspectual".

the above usage events contain a specific endpoint that needs to be, or even can be, spelled out. But even so, the non-punctual processual predicates combine well with the resultative particle to give rise to an "emergent" (Fauconnier and Turner 2002) meaning-that those particular non-punctual processes reach a resultant state produced by the events. The endpoints are not specified because the definite results of something being blended, someone being beaten and someone behaving awkwardly are not relevant enough to be worth the effort for the speaker to elaborate them linguistically. What is at stake for the speaker is that as the event unfolds, the non-punctual process develops to a certain degree which is worth mentioning, or reaches a certain point which is considered to make a difference. Therefore in (4-34), the speaker linguistically formulates the event with a verb followed by the resultative particle up to express that the process of mixing develops into a situation where the races are mixed together enough. The beating incident in (4-35) is similarly reported with the resultative particle not because the process reaches an inherent endpoint but because it reaches a point where the victim has been considered by the speaker to be truly beaten. The use of up in (4–36) also profiles the tracting awkwardly to a certain extent such that the tr is considered by the speaker to have made a joke of himself. Therefore, 'completive' is a meaning more "subjective" (Langacker 1985) than 'vertically higher' and 'approaching', and exhibits greater involvement of the consciousness of the conceptualizing subject, which constitutes a case of subjectification. I will return to this issue in Chapter 7.

This is why 'completive' should not be regarded as a monolithic whole, but consisting of four sub-clusters. Many instances in my corpus cannot be classified as a straightforward member of 'completive', since the specific final state of these events is not linguistically elaborated. However, the endpoint of the processes can still be subjectively inferred by the hearer, given what they believe to be a typical result of the particular kind of process at hand.

The conceptual representation for this cluster of usage events is rendered in Figure 4.10. Compared to the representation of previous sub-schemas in Figure 4.8, Figure 4.10 remains GOAL-prominent, since the resultant state is relevant but is not linguistically detailed, hence the dotted circle.

#### 4.3.3.5 Interim summary for 'completive'

In 4.3.3, I covered four constructional schemas of up 'completive', each having its distinct patterns of concept elaboration. There are two major points worth reiterating.

First of all, I demonstrated how 'completive' should be viewed as an extension from 'approaching' by providing a comparison between the image-schematic con-



Figure 4.10: The image-schematic representation of usage events, the endpoint of which is relevant but unspecified

tent of 'approaching' and 'completive'. I further illustrated the gradual shift from SPACE to TIME by analyzing several variants of the VPC *catch up*.<sup>46</sup>

In addition to the extension from 'approaching' to 'completive', I dealt with the usage cluster of [V] - [UP] that does not have an inherent endpoint, as opposed to the other endpoint-specified (and GOAL-prominent) sub-schemas covered in 4.3.3.1, 4.3.3.2 and 4.3.3.3.

Regarding 'completive', it is worth reiterating that my analysis goes one step further than Cappelle (2005), in that my scope expands to include the NP and the PREPP in the co-text of up. I discussed how exactly this conceptual endpoint can be linguistically elaborated by the NP, the PREPP, or the verb, which were argued to be unusual cases of the aspectual up in Cappelle.<sup>47</sup> For most cases, I argue that the endpoint of the processual predicate remains profiled but is not relevant enough to be linguistically specified.

Such a gradation of semantic shift is not limited to *catch up*. Some instances of *give up* are similarly open to dual interpretations, such as *They want control over their health care. They don't want to give it up to the government*. (authentic examples of 'approaching') *They want to be in charge. They don't want to give it up*. (authentic examples between 'approaching' and 'completive') *They don't want to give up*. (constructed example of 'completive') Such a gradual semantic shift from SPACE to TIME exhibits "attenuation" (Langacker 1999) instead of metaphorical mapping (Sweetser 1990), which is symptomatic of subjectification. This is a point that I will return to in Chapter 7.

I do not agree with Cappelle's (2005) analysis of the usage events of up which involve an underspecified endpoint to be the 'typical' cases of the aspectual up. I suspect that the reason Cappelle believes such highly subjective cases to be the central members of up 'completive' is due to their high frequency, which the author did not specifically point out. I consider such highly subjective cases to be an extension from cases where the endpoint of the process is more specific and less subjective, with Langacker's (1990, 1999) attenuation and subjectification as an organizing principle.

# 4.3.4 Summary of the chapter

The analysis in this chapter has prepared the way for further theoretical discussion in the following chapters. By distinguishing between sub-schemas belonging to the same sense, I have shown that each sense should not be understood as a homogeneous semantic category, but as a group of principally related clusters of usages in the form of constructional schemas. I analyzed the semantic categories using two important criteria that help define a sense in PP, concept elaboration and grammatical patterning. An observation on authentic linguistic data reveals that each sense does have its own pattern of concept elaboration and grammatical profiling, as has been suggested by PP, and that distinguishing between minor clusters of usage within a sense does help better capture the relation between the senses. Table 2 below summarizes the discussion in this chapter:

	Grammatical profiling	Concept elaboration	
'Vertically higher'	_	<ol> <li>PATH-prominent</li> <li>Upward trajectory instantiated in SPACE</li> </ol>	
'Approaching'	_	<ol> <li>GOAL-prominent</li> <li>Involvement of an onstage conceptualizer</li> <li>Trajectory being upward only with respect to the onstage conceptualizer</li> </ol>	
'Completive'	[V] - [UP] as the predominant pattern	<ol> <li>GOAL-prominent</li> <li>A verb, PREPP, or NP as the source of concept elaboration</li> <li>GOAL possibly underspecified</li> <li>Trajectory being upward at the level of event structure*</li> </ol>	

**Table 2:** Distinct patterns of grammatical profiling and concept elaboration

 for the core senses of up

Note: \* This particular point is an important issue that I will return to in Chapter 5.

In addition, my analysis accentuates the role of schematization and categorization in language use. In CG, a combination of symbolic assemblies takes the form of constructional schemas, which I define in terms of concept elaboration and grammatical patterning. A constructional schema can be used as a categorizing structure with which one classifies a usage event as belonging to a particular semantic category. For our case of up, I identify the semantic category of up in a usage event with respect to the categorizing structure that contains this particular target lexical construction.

My analysis also points out that some cases of 'approaching' may invoke dual interpretations, but this happens only within certain constructional schemas. The reading of 'completive', through repeated use in that particular constructional schema, may become a cognitive routine and take on a life of its own.

My analysis is in line with the basic tenet of CG that language makes use of basic human cognitive abilities. I showed how the different core meanings of up correlate with the imagistic structure, in that different senses put different parts of the conceptual base into focus. This reflects a basic operational mechanism in human perception. Secondly, the meaning of 'approaching' involves a non-default vantage point within the scope of predication. The use of up makes sense only when one takes into account the onstage conceptualizer. This "shift in point of view" is also a basic operating principle in human perception.

# 5 THE METAPHORICAL SENSES OF UP

In Chapter 4, I discussed three major semantic clusters for *up*. Two of them, i.e. 'vertically higher' and 'approaching', are understood against the domain of sPACE, and the last one, 'completive,' is the resultant subjective meaning after the physical sense associated with *up* completely fades away. These three clusters of usage exhibit different patterning of constructional profile and concept elaboration. It must be reiterated that the three meanings exhibit a gradual shift in the imagistic content at the conceptual level: With the shared SOURCE-PATH-GOAL schema in the conceptual base, 'vertically higher' mainly profiles PATH and may optionally invoke source or GOAL. On the other hand, without the involvement of sPACE, 'completive' highlights the endpoint of the image schema in a highly abstract sense. Compared to the above two senses, 'approaching' exhibits an intermediate degree of involvement of SPACE and is neither typically PATH-prominent like 'vertically higher' nor exclusively GOAL-prominent like 'completive'. In addition, for 'approaching', an onstage conceptualizer needs to be in place to account for the attenuation of the vertical sense.

In this chapter, I follow the image-schematic analysis proposed in Chapter 4 and discuss the relation between the other meanings of up in non-spatial domains and the SOURCE-PATH-GOAL schema.

### 5.1 'Accessible'

The first metaphorical meaning to discuss is 'accessible'. This meaning shares some structural commonality with the GOAL-prominent schema of [V] - [UP] for 'vertically higher', as they both involve roughly the area of Interactive Focus,

which includes notions of possession, influence, and proximity (Lindner 1983: 161) and is thus visible and as a result noticeable (Lindstromberg 1997).<sup>48</sup> Below, I compare the two schemas of [V] – [UP] associated with 'vertically higher' and 'accessible' and investigate the usage cluster of 'accessible' based on the three criteria of PP (Evans 2004, 2005).

### 5.1.1 'Accessible' and the Meaning Criterion

The meaning of 'accessible' exhibits its distinctive semantic characteristics. Compare (5–1), which appeared in 4.3.1.2 and is repeated here for ease of reference, and (5–2). The two instances both involve the VPC *pick up*, with (5–1) meaning 'vertically higher' and (5–2) 'accessible'.

- (5-1) ... projects ranged from rock hauling, taking rocks out of the creek, picking them **up**, hauling them up the hill, putting them in a pile.
- (5–2) By experimenting with the languages of several indigenous nations, they formed a pidgin with which they could communicate. Then she began to pick **up** English with astonishing rapidity.

A comparison between (5-1) and (5-2) shows a semantic difference. As I claimed in Chapter 4, the entity that follows a vertically higher trajectory to an unspecified goal is the tr of up, linguistically represented by *rocks*. In (5-2), the entity that moves upward to an unspecified GOAL is *English*, which becomes more accessible to the subject *she* as a result of its vertical motion. Excerpts (5-1) and (5-2) both involve the Interactive Focus as the endpoint; the only difference is the conceptual domain that is involved in understanding the instances.

Examples (5-3), (5-4) and (5-5) are also typical instances of this cluster of usage:

- (5–3) [I]n the Middle Ages, some very clever theologians even came **up** with very exotic spiritual and symbolic explanations.
- (5-4) Obviously, this is the storm that we always prayed would never show **up**, and a major storm coming up the Houston Ship Channel.
- (5-5) Do I need to go to a lawyer? No. It does not need a lawyer either to draw **up** any document or to advise you although you may wish to consult a professional adviser if a particularly large sum is involved...

<sup>48</sup> An alternative to Lindner's idea of the Interactive Focus would be the conceptual metaphor FUNCTIONAL IS UP (Radden 2000: 96) in explaining 'accessible'.

The above three instances are all typical of 'accessible'. In (5-3), what conceptually enters the Interactive Focus and becomes cognitively accessible is the spiritual and symbolic explanations after an effort made by theologians.<sup>49</sup> The entity that is cognitively accessible in (5-4) is a storm, which appears in the field of knowledge of the conceptualizer and becomes active. For (5-5), an agent creates a document and makes it accessible in either the cognitive or the perceptual domain as a result of a process of drawing up something.

By comparing these two instances of *pick up* which involve different conceptual domains and the three additional examples, we see that up in (5–2) to (5–5) does exhibit an additional meaning that is not present in 'vertically higher', thus meeting the Meaning Criterion of PP.

### 5.1.2 'Accessible' and its associated constructional schemas

A comparison between (5–1) and (5–2) has shown that the Interactive Focus is involved in both 'vertically higher' and 'accessible', which can be elaborated within the identical grammatical construction [V] – [UP]. Below, I address different types of concept elaboration of 'accessible 'for up.<sup>50</sup>

#### 5.1.2.1 NP as the source of concept elaboration for 'accessible'

The first pattern of concept elaboration of 'accessible' is a pattern induced by an NP in the co-text of up. Excerpts (5–2) and (5–3) presented above and (5–6) below are typical of this usage cluster.

(5-6) Right. You brought **up** a lot of good points, including one about the role of the former first lady -- at that time, a pivotal role in health care.

The primary figure that moves upward in (5–2) is a type of skill, linguistically coded by *English*. The tr enters Interactive Focus and as a result becomes

<sup>49</sup> The phrase *come up* in (5–3) could alternatively be analyzed as 'approaching'. I observe that there is a metonymic connection between 'approaching' and 'accessible'— As an entity enters the Interactive Focus of the conceptualizer as its endpoint of trajectory, accessibility is a natural consequence of its approaching.

<sup>50</sup> There is certainly more than one grammatical construction that might be involved in 'accessible'. But as I mentioned in Chapter 4, the main point of the discussion is not to present an exhaustive list of all possible constructional schemas for a particular sense. My main concern here is to investigate what may invoke the notion of Interactive Focus and the cognitive domain, which triggers a semantic transfer away from the prototypical meaning of 'vertically higher' for *up*. Another crucial point of my discussion is to show how the connection between A/D-alignment and domain proposed by Croft (1993) can help shed light on the complicated semantic patterns of *up* in real usage.

available to the agent. In (5-3), the tr of *came*, coded by *some very clever theologians*, coincides with that of *up* and follows a vertical trajectory to enter the unspecified endpoint of its path. By reaching this unspecified endpoint in an abstract domain with an entity, linguistically elaborated by *explanations*, the agent elevates that particular entity and makes it cognitively accessible. The tr of *up* in (5-6) is *a lot of good points*, which is abstractly carried into the area of Interactive Focus by the tr of *brought* and becomes noticeable in the domain of COGNITION and interactively accessible to the discussants.<sup>51</sup>

However, an important question is relevant here: The underlying image-schematic content does not seem to prompt a shift in conceptual domain from SPACE to COGNITION, but how does the domain transfer happen, and what linguistic element and conceptual operation may make that happen?

To answer this question, an understanding of conceptual domain and its relation with conceptual autonomy and dependence needs to be in place. Based on Langacker's (1987) distinction between an autonomous and a dependent predication, also termed "A/D-alignment", Croft (1993) proposes that in the process of joining symbolic assemblies, the autonomous predication may cause domain mapping (metaphor) in the dependent one, and the dependent predication may induce domain highlighting (metonymy) in the autonomous one.

According to Langacker (1987, 2008), a typical feature of a dependent predication is that it has a schematic slot for another predication to fill in and to elaborate on the information gap in that particular dependent predication. A predication is "dependent" in the sense that it relies on another predication to elaborate its informational content. A preposition, for instance, encodes a relation between two entities, and typically contains two slots for two different NPs to provide details. Therefore, in relation to a participating NP, a preposition is the dependent predication and the NP the autonomous predication. A similar analogy can be made to a verb and its argument. An intransitive verb inherently contains one slot for an NP as its subject, and it is in this sense that the intransitive verb is dependent on its subject NP for elaboration.

In comparison to a dependent predication, an autonomous predication does not depend as much on another predication to fill in an inherent information gap. An autonomous predication is autonomous in the sense that it can stand alone as a self-contained predication. Therefore, in the noun-preposition assembly that I mentioned above, the preposition cannot be said to be autonomous, since it needs its two participants and can hardly be construed by itself. Likewise, an intransitive verb cannot be the autonomous predication when it combines

<sup>51</sup> According to *Merriam Webster Online* (accessed Jun 24, 2010), the meaning of *point* includes 'the most important essential in a discussion or matter', which I consider related to interaction and to the domain of COGNITION.

with an NP, since it is always hard to imagine any process without considering its participant. In these two types of symbolic assemblies, the NP is considered the autonomous predication, since it is much easier to imagine an NP without including the spatial relation in which it participates or the process of which the NP is a part.<sup>52</sup>

Now, let us come back to our data to see how domain mapping and highlighting causes the semantic extension from 'vertically higher' to 'accessible'. The commonality within this sub-cluster of usage is that the domain of knowledge, interaction and cognition is prompted by an NP in the co-text of up. In the symbolic assembly of *pick up* in (5-2), no domain other than SPACE is involved. But as pick up combines with English, pick up serves as the dependent predication since it contains an inherent schematic slot for *English* to provide information. In this symbolic complex, the autonomous predication is *English*, which does not require another predication and can be construed independently. Since the predication English is related to the notions of knowledge and skill in the cognitive domain, the domain mapping from SPACE to COGNITION in the dependent predication *pick up* can be attributed to its autonomous counterpart *English*. In (5-3), the combination of *came up* does not seem like a candidate for invoking the domain of COGNITION, since both predications, came and up, belong typically to the domain of SPACE. A look at the PREP that joins with came up, with very exotic spiritual and symbolic explanations, reveals the NP after with to be the source of concept elaboration for 'accessible'. As a noun, the predication explanations can conceptually stand alone, and when it combines with its preceding modifying elements from symbolic all the way up to very, the noun induces domain mapping in these dependent predications. As the resultant complex NP very exotic spiritual and symbolic explanations is joined by with, it also prompts the domain of COGNITION and induces domain mapping in with, since in a preposition-noun combination, the noun is always the autonomous predication and the preposition the dependent one. The case of *brought up* in (5-6) is similar. The assembly itself should be considered typical in the domain of SPACE, since both bring and up are prototypically space-related concepts. But as brought up joins the comparatively autonomous predication a lot of good points, the autonomous predication triggers the domain of COGNITION and induces domain transfer in the dependent predication brought up.

<sup>52</sup> Conceptual autonomy and dependence are essentially relative and context-dependent. An NP can be the autonomous predication when it combines with a verb or a preposition, but can be the dependent predication when it joins another NP to form an N-N compound. A verb can also be the dependent predication in relation to its arguments, but may serve as the autonomous predication when it is modified by an adverb or a PREP. In addition, the distinction of autonomy and dependency is determined by how much one element in a symbolic assembly needs the other for elaboration of information, so the distinction is not dichotomous but a matter of degree.

#### 5 The Metaphorical Senses of Up

The above discussion shows that in 'accessible', an NP in the co-text of up may do the job of introducing the domain of COGNITION and of creating a domain mapping that adjusts the reading of up. Below, I turn to another type of concept elaboration for 'accessible': the verb that precedes up.

#### 5.1.2.2 The verb as the source of concept elaboration for 'accessible'

In my corpus, the second source of concept elaboration for 'accessible' is the verb that precedes up. A commonality within this usage cluster is that the verbs are related to the notion of bringing into existence. The following excerpts, (5–7) and (5–8), are typical.

- (5-7) By the way, although the iTunes store is dropping its digital rights management policy, you should know that the email address you used to sign **up** for iTunes is coded into each song you buy, so if you illegally share tunes you bought at their store, it's easy to trace back to you.
- (5-8) But also there's a big Virginia Tech fundraiser. So I'm going to go with my old college roommate, Peggy Fox, and we're going to try to drum up a little support for the school because it's tough this time of year for people to give.

The verbs in (5-7) and (5-8) are verbs of physical action that can bring an entity into existence. The action in (5-7) is *sign*, with which the tr of the action registers and turns in his personal information by a process of symbol creation, and this action of creation brings his personal information into a state of being available to the iTunes store. The physical process in (5-8) is *drum*, which is a process of producing sounds by making a succession of strokes on an instrument. By engaging in this action, the tr of *drum* brings into existence *a little support*.<sup>53</sup>

It should be pointed out that verbs in this category are not limited to verbs of physical action like those in (5–7) and (5–8). I find that verbs of mental action, or cognition, are also related to the notion of bringing into existence in an abstract sense and can also trigger the meaning of 'accessible'. (5–9) and (5–10) are representative of such verbs of cognition:

(5-9) Harris dreamed **up** the idea as she prepared her son, then five, for a game. "It was after a crazy scene in the locker room," she recalls.

<sup>53</sup> The assembly *drum up* is an example where the dependent predication also induces domain highlighting in the autonomous predication. When combined with the dependent predication up, a domain highlighting occurs in *drum* and metonymically shifts its reading from 'a musical instrument' to 'to produce (an entity) by using a musical instrument'. Another interesting point about *drum up* is that the reason why only the drum, but not other musical instruments, is recruited in the [V] - [UP] sub-schema of 'accessible' may have to do with the role played by drums in a cheerleading scenario.

(5-10) But no one in the family had ever expected her to stick with gardening; they had all assumed that sooner or later Charlotte would think up some more appealing project and wander away, letting the acreage revert to its natural state.

In (5-9), the tr of the verb, *Harris*, differs from that of up, which is coded by *the idea*. By means of DREAM, which is a typical mental process, the primary figure causes in the cognitive domain an elevation of an abstract entity, represented by *the idea*, so that the entity becomes cognitively accessible as a result of the tr's dreaming. Excerpt (5-10) similarly involves a mental action, which is linguistically elaborated by *think*. The tr of *think* makes an entity accessible in the cognitive domain by carrying out the process, which is elaborated as *some more appealing project*.

As we look at the above two sub-clusters of usage, where verbs of physical and mental creation may prompt the domain of COGNITION, one observation is straightforward—although in some cases, there might be an NP in the co-text that could arguably trigger COGNITION, the verbs without a doubt are typically associated with the notion of bringing into existence and can certainly be considered an important source of concept elaboration for 'accessible'. From (5–7) to (5–10), where up is always combined with a verb to modify the resultant state of the process, up is the dependent predication in relation to the verb, since as an adverbial particle, up carries a schematic slot for a verbal process to specify the nature of that particular process. In such cases, the verb is in turn conceptually autonomous in relation to up, in the sense that a verb does not necessarily require an adverb to specify the result of that process.

Therefore, as the autonomous predication, the verb induces domain mapping in the dependent predication and causes a metaphorical transfer from SPACE to COGNITION.

#### 5.1.3 Between 'accessible' and 'completive'

In 5.1.2, I addressed in detail how the co-texts of up collaborate to introduce the cognitive domain and to create a domain mapping in up. This generalization makes 'accessible' seem straightforward. However, in the corpus, I found some instances with a dual reading between 'accessible' and 'completive.' (5–11) and (5–12) are examples of such borderline cases:

- (5-11) Is a covenant complicated? Not really. A Deed of Covenant is a legal document which needs to be correctly drawn up and signed. The law relating to covenants is quite complex...
- (5-12) The campaign, which aims to raise £500,000, was originally set up in memory of a seven-year-old Kent boy who dies in 1979.

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We can formulate an interpretation of 'accessible' and an alternative of 'completive' for both (5-11) and (5-12). On one hand, in (5-11), what moves upward in the cognitive domain, reaches the Interactive Focus and become cognitively accessible is an entity coded by *a legal document*. In (5-12), the tr of *up* is *the campaign*, which becomes existent and active as a result of someone setting it up. On the other hand, for (5-11), we could alternatively construe the accessibility of the legal document as the final state brought about by the process of drawing it up, in order for the document to be signed. The state of being existent and active of the campaign in (5-12) similarly could be understood as a resultant state caused by a process of someone setting it up.

A look at the dual readings of (5-11) and (5-12) begs the question: What causes the GOAL-prominent reading for the two cases, and what distinguishes (5-11) and (5-12) from instances (5-3) to (5-10), which are typical instances of 'accessible' and do not seem to involve an obvious GOAL-prominent reading?

I argue that the main difference lies in the involvement of the passive construction. Langacker (2008: 120–1) points out that the past participle, formed by *-ed* and other possible morphological variants, imposes a posterior construal on the verbal process and highlights the final state of the event. Indeed, as we paraphrase the above two instances into active voice, the endpoint focus becomes much weaker, and the reading of 'accessible' predominates as a result, as in (5–13) and (5–14).

- (5-13) Is a covenant complicated? Not really. Someone needs to draw up a deed of covenant. The law relating to covenants is quite complex... (constructed)
- (5-14) Someone originally set **up** a campaign, which aims to raise £500,000, in memory of a seven-year-old Kent boy who dies in 1979. (constructed)

Therefore, a comparison of (5-11) and (5-12) with the rest of the examples in 5.1 shows that, since the imagistic content of 'accessible' involves an emphasis both on PATH and on GOAL, the interpretation of 'completive' can only stay latent when the usage event is presented in the active voice.<sup>54</sup> However, as the past participle in a passive construction does the job of profiling the final state of a verbal process, the reading of 'completive' becomes accentuated so that (5–11) and (5– 12) may receive an obvious dual reading between 'accessible' and 'completive'.<sup>55</sup>

<sup>54</sup> Remember that in Chapter 4, we discussed 'completive' being a conceptual residue as a result of the attenuation of the physical sense. For (5–11) and (5–12), the GOAL-prominent feature of 'completive' is imminent, but since the stronger reading of 'accessible' is there, the GOAL-oriented nature is downplayed, unless a passive construction brings it to focus.

I do not claim that a dual reading caused by the passive construction occurs only between 'completive' and 'accessible'. Some other senses, such as 'approaching' and 'good', which I cover later in this chapter, may bear such ambiguous semantic relation with 'completive' as well.



Figure 5.1: A second approximation to 'completive'

Based on this new connection between 'completive' and other senses established via the passive construction, the intertwined relation between 'completive' and other semantic clusters can be updated and pictorially shown as Figure 5.1.

In addition to 'accessible', there is another usage cluster that bears a complicated relation with 'completive', which I explicate below.

## 5.2 'More'

The meaning of 'more' for up has been extensively studied in previous literature. The motivation for the meaning derivation has been argued to be based on the experiential correlation of MORE IS UP (Boers 1994; Lindstromberg 1997; Tyler and Evans 2003). However, the nuts and bolts of how 'more' is instantiated in real usage events has not been covered, and so I will discuss it in this section.

#### 5.2.1 'More' and the Meaning Criterion

The meaning of 'more' has distinctive semantic characteristics not found in the other semantic categories. Examples (5-15) and (5-16) are typical:

(5–15) They make a lot of money and they plow it back in – both into the economic side of things, but also into political side of things and they build **up** more influence.
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(5–16) The global economy remains highly complex, interconnected and imbalanced. The Chinese still pile **up** surpluses and need to put them somewhere.

In these two examples, the use of up denotes the trajectory of an entity that moves upward, not in the domain of SPACE but in QUANTITY. The entity that moves vertically higher as the tr of up in (5–15) is coded by *influence*, and in (5–16) the upward-going primary figure is *surpluses*.

As we compare this group of usage with those in Chapter 4, we do find an additional meaning not present elsewhere, since the above instances of 'more' consistently involve QUANTITY. The above semantic distinctiveness satisfies the Meaning Criterion of PP.

### 5.2.2 'More' and its associated constructional schemas

As we saw in Chapter 4, patterning in both grammatical constructions and in concept elaboration reflects the image-schematic content that underlies the use of language, including the semantics of up. There are basically three possibilities in terms of what gets profiled in the SOURCE-PATH-GOAL schema: More often than not, PATH or GOAL receives more attention and in only few cases is SOURCE profiled.<sup>56</sup>

I found that all the examples of 'more' involve an NP that triggers QUANTITY, which can be classified into three constructional schemas in terms of profiling. I explore the details below.

#### 5.2.2.1 'More' in a PATH-prominent constructional schema

In the corpus, the constructional schemas for up 'more' exhibit exclusive PATH-prominency. Specifically, at least one constructional schema exhibits such conceptual characteristic, which is [NP] – [V] – [UP]. (5–15) above and (5–17) below instantiate this schema in the domain of QUANTITY, where only PATH stands out, with SOURCE and GOAL remaining in the conceptual base.

# (5–17) Bob Rafelson had fortunately obtained Jack's signature for another BBS film before the price went **up**...

This finding is in line with observations on the SOURCE-PATH-GOAL schema of motion events in previous literature (e.g. Ikegami 1987; Stefanowitsch and Rohde 2004; Talmy 1985, 1996). Talmy (1985, 1996), for instance, claimed that it would be more likely to window just the PATH or the GOAL than just the SOURCE, which reflects the nature of human attention as being GOAL-biased.

As I mentioned earlier, in (5–15), the primary figure that moves vertically higher as the tr of up is encoded by *influence*. For this particular instance SOURCE and GOAL in the trajectory do not receive linguistic elaboration and do not play a significant role. In (5–17), the primary figure that goes upward in the domain of QUANTITY is the entity represented by the expression *price*. SOURCE and GOAL are not relevant here, either. PATH sticks out from the conceptual base and is highlighted, which is reflected by the use of up.

In (5–17), up is a directional adverb that modifies the verb went. In the symbolic assembly of *went up*, the adverb serves as the dependent predication, since a directional adverb describes the detailed manner of motion in a process. Accordingly, the adverb requires a verb to fill in the information gap to specify what kind of process the manner is a part of. On the other hand, a verb does not require an adverb to specify the manner of the process, since manner is usually only a concept peripheral to a process. Therefore, the extent to which up depends on the verb is obviously greater than the extent to which the verb depends on up. Thus, we can safely judge up to be the dependent predication and the preceding verb to be the autonomous one. However, since both go and up belong to the domain of SPACE, there will be no issue of cross-domain transfer for this symbolic assembly. But as we take a further step to analyze the more complex symbolic assembly of *the price went up*, the issue of domain mapping does come up. As has been discussed, the symbolic assembly went up typically triggers the domain of SPACE, but what combines with it, i.e. the price, prompts the domain of QUANTITY. As the autonomous predication when combined with a verb phrase, the NP the price induces a domain mapping from SPACE to QUANTITY in its dependent counterpart, went up.

Following from the above discussion, we find that for 'more' in [NP] - [V] - [UP], the NP triggers the domain of QUANTITY and should be considered the major source of concept elaboration in that particular constructional schema.<sup>57</sup> Below, I turn to another constructional schema that profiles SOURCE in addition to PATH.

#### 5.2.2.2 'More' in a PATH- and SOURCE-prominent constructional schema

As has been mentioned in Chapter 4, in addition to PATH, in some cases, SOURCE is also in profile in the domain of SPACE. I observe that the same holds in the domain of QUANTITY. The above imagistic structure is represented by the constructional schema [V] – [UP] – [PREPP], instantiated by instance (5–18).

<sup>57</sup> This is not to deny the role of the verb in inducing metaphorical mapping. As we can see in some of the examples, verbs may indeed invoke QUANTITY, but the point is that even in cases where the verb could be argued to create a domain mapping, there is always an NP in the co-text that also triggers the metaphorical mapping. The pattern of concept elaboration of 'more' seems a bit different from what we can observe in some other usage events, where the verb plays the major role in concept elaboration. This point will become self-evident in the discussion of 'happy' below.

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(5-18) Now, contract that muscle 20 times at approximately one squeeze per second. Build **up** from a set of 20 to two sets of 75.

In (5–18), the subject NP is omitted in the imperative construction and does not correspond to the tr of up. The tr of up, understood in the context to be the number of muscle contractions, follows a vertical trajectory coded by up, with *a set of 20* as its SOURCE and *two sets of 75* as its GOAL. In addition to the frequently profiled PATH and GOAL, SOURCE is also prominent in this example, which is reflected by use of the PREP led by *from*.

As has been discussed in 5.2.2.1, the imagistic structure does not have to do with the metaphorical mapping that occurs between the domain of sPACE and QUANTITY to account for the meaning extension from 'vertically higher' to 'more'. The cross-domain mapping is likewise prompted by the other lexical elements in the co-text of *up*. The complex symbolic assembly of *build up* is formed by joining two predications both typically belonging in the domain of sPACE, which is in turn joined by the PREP *from a set of 20 to two sets of 75*. If we further break down this PREP, we can identify NPs that invoke QUANTITY: *a set of 20* and *two sets of 75*. When combined with the prepositions, these NPs serve as autonomous predications and create a domain mapping from sPACE to QUANTITY in the prepositions. Therefore, since the NP in a PREP does the job of introducing the domain of QUANTITY, it makes sense to consider that also as an important source of concept elaboration for 'more'.

#### 5.2.2.3 'More' in PATH- and GOAL-prominent constructional schemas

The third type of imagistic structure for 'more' profiles the path and the goal of the trajectory. This imagistic structure can be prompted by two constructional schemas. The first schema identified in the corpus is [NP] – [V] – [UP] – [PREPP], which is instantiated by (5–19) below.

## (5-19) I put it up for auction on eBay, for charity. Turns out, people actually bid- bid **up** to \$8,800.

In (5-19), the primary figure that goes upward in the domain of QUANTITY is the price for something auctioned. The vertical trajectory has a relevant endpoint, which is elaborated by the PREPP led by *to*.

As I footnoted previously, a verb may also be a typical source of concept elaboration for 'more', as is illustrated by the occurrence of *bid* in (5–19). In the symbolic assembly of *bid up*, the predication up requires a verb to fill in its schematic slot to elaborate on the nature of the process that it modifies, while up is not an

obligatory part of the predication *bid*. Therefore, in this assembly, *bid* should be considered the autonomous predication and up the dependent one. As the verb combines with up, it induces a domain transfer from SPACE to QUANTITY in up, since the verb itself, meaning 'to raise the price of', invokes QUANTITY.

Therefore, as we have seen with the illustration of (5-19), in addition to the subject NP and the NP contained in the PREPP, a verb may also introduce QUAN-TITY and should be considered an important source of concept elaboration for up 'more'.<sup>58</sup>

After [NP] - [V] - [UP] - [PREPP], the second GOAL-prominent constructional schema for 'more' is [NP1] - [V] - [UP] - [NP2]. In this cluster of usage, the domain of QUANTITY is also involved, but compared to [NP] - [V] - [UP] - [PREPP], the conceptual endpoint of the second schema is not elaborated by a PREPP, but is implicitly prompted by one of the verbal arguments. Excerpts (5–20) and (5–21) are typical instances.

- (5-20) Oliver did sets of pushups and sit-ups. He'd built **up** the muscles in his arms and shoulders quite a bit...
- (5-21) If you're a Clinton for the Clinton campaign. You know, they needed to not have him win 11 in a row and build up this huge mathematical delegate lead, and I think there are two interesting things to say about that.

The figure that moves vertically higher in terms of quantity in (5-20) is the amount of muscles in someone's arms and shoulders as a result of exercise. In (5-21), the tr of *up*, the entity that follows an upward trajectory in the domain of QUANTITY, is *this huge mathematical delegate lead*, which generates an interpretation that a larger number of delegates has been accumulated as a result.

Note that the image-schematic structure that underlies (5-20) and (5-21) does not involve just PATH. In addition to PATH, its endpoint should also be considered prominent. In these particular cases, GOAL is prompted by the definite object NPs, which pose a limit to the progression of the event. As we discussed in 4.3, the definiteness of an argument of the verb may impose a boundary on how the event is construed and as a consequence may serve as the source of concept elaboration for 'completive'. In a similar vein, the definite verbal arguments in (5-20)and (5-21) subtly prompt an endpoint for the vertical trajectories in the domain of QUANTITY, with the GOAL-prominent imagistic structure being imminent in the conceptual base.

Some may still question the GOAL-prominency of (5-20) and (5-21), doubting the saliency of the endpoint focus in these two instances. But if we take a further

I addressed the role played by the NP in the PREP in 5.2.2.2 and established its potential to introduce the domain of QUANTITY. Here, I turn to the role played by the verb. But there is a good possibility that the NP and the verb may both contribute to prompt QUANTITY.

look at the constructed counterparts of (5-22) and (5-23) below, the endpoint focus of (5-20) and (5-21) becomes clear.

- (5-22) Oliver did sets of pushups and sit-ups. He would build **up** muscles in his arms and shoulders quite a bit..... (constructed)
- (5-23) If you're a Clinton -- for the Clinton campaign. You know, they needed to not have him win 11 in a row and build up a huge mathematical delegate lead, and I think there are two interesting things to say about that. (constructed)

In (5–22), the indefinite NP, *muscles*, does not do the same work of creating an event boundary like its definite counterpart does in (5–20).<sup>59</sup> The interpretation of (5–23) is a person putting on some mass in some area, but the sentence does not specify the final state of certain muscle groups after a bulk-up. The demonstrative *this* in (5–21) does a similar job of delimiting the progress of event by imposing a boundary to the process of increasing. Replacement of the demonstrative with an indefinite article removes the boundary and leaves with (5–23) only the interpretation of the number of delegate getting higher.

A comparison between the two GOAL-prominent constructional schemas reveals a very subtle difference in how up is to be interpreted in the constructions. For [NP] - [V] - [UP] - [PREPP], the endpoint of the PATH is explicitly elaborated by a PREPP, so it is still easy for one to attribute the salient endpoint focus to the PREPP as the source of concept elaboration. By contrast, for [NP1] - [V] - [UP]- [NP2], the endpoint focus is implicitly introduced by the definiteness of one of the verbal arguments, which may increase the possibility for one to attribute the endpoint focus to up. Therefore, in this constructional schema, it is not uncommon for up to pick up a dual reading between 'more' and 'completive'. Figure 5.2 below pictorially summarizes our discussion above, where the dual reading of upbetween 'more' and 'completive' occurs in the construction of [NP1] - [V] - [UP]- [NP2] with a definite NP2.

After an exploration of the constructional schemas associated with 'more', I find that in addition to 'accessible', 'more' can also be linked with 'completive' via a particular constructional schema, which now facilitates a third approximation to 'completive'. It turns out that 'completive' bears a semantic connection not only with 'approaching' and 'accessible' but also with 'more', and the connections are made possible by different constructional schemas. Figure 5.3 reflects this modification:

From the above discussion, two issues can be underlined. First and foremost, the grammatical constructions that participate in the usage cluster of 'more' are

<sup>59</sup> The endpoint focus in (5-20) could also be highlighted by the past participle. The point of our discussion here is simply that the definiteness of the NP could be another contributory factor in the GOAL-prominent feature of (5-20) and (5-21).



Figure 5.2: Dual interpretations of *up* between 'more' and 'completive' within certain constructional sub-schema



Figure 5.3: A third approximation to 'completive'

similar to those of 'vertically higher'. Therefore, the main difference between the two lies in whether the domain of QUANTITY is involved. As our discussion has shown, there are a couple of patterns of concept elaboration that may trigger QUANTITY. Based on Croft's (1993, 2006) insight, I generalize from my corpus that in a usage event that involves 'more', QUANTITY must be introduced either by the verb or by the NP in the co-text of up. Specifically, the domain mapping from SPACE to QUANTITY has to be induced by an autonomous predication that combines with up in the whole complex symbolic assembly. The second observation is that within one constructional schema, the readings of 'more' and 'completive'

may co-exist. On one hand, the QUANTITY-related nature of the NP may induce a domain mapping in up, resulting in the meaning of 'more'. On the other hand, the definiteness of the NP may impose an endpoint on the process so that the meaning of 'completive' is also imminent in the conceptual base. Up in this particular constructional schema illustrates the possible intricacy of how conceptual domains and image-schematic structures may collaborate to influence meaning in use.

#### 5.2.3 Beyond the domain of QUANTITY into the event stricture level

The above discussion has sufficed to establish 'more' as a distinct sense based on PP, since it exhibits both an additional meaning and a distinct pattern of concept elaboration that invokes QUANTITY triggered by the verb or an NP in the co-text. However, some cases in our corpus seem to involve QUANTITY at a more abstract level. Compare (5–24) and (5–25) as an illustration.

- (5–24) Should they be speeding **up** because someone is behind them? Or, should they be slowing down because sooner or later their hectic pace will do them in?
- (5–25) 'My uncle used to employ her. William Coombes. I do know her quite well.' She sounded indignant and resentful, and he slowed **up** deliberately.

An analysis of (5-24) following my argument in 5.2.2 would render a simple analysis that the reading of 'more' is based on MORE IS UP; LESS IS DOWN, and that the use of up in this particular instance is motivated by the construal of speed as an amount of physical objects. However, such explanation does not hold for (5-25), which also involves the notion of speed, as a conceptualization of speed as an amount of physical objects would turn the assembly of *slow up* into an anomaly.

I believe that an appropriate understanding of the pair has to be found at a very abstract level of "event structure metaphor" (Barcelona 2000; Lakoff 1993; Radden 2000), although the pair does involve MORE IS UP; LESS IS DOWN in a schematic way. In particular, I argue that to better understand (5–24) and (5–25), a couple of event structure metaphors should be involved. The first one is AN ATTRIBUTE (PROPERTY) IS AN OBJECT.<sup>60</sup> This can be instantiated by the sentence *I don't have any luck* (cited from Radden 2000: 66). Following on from the metaphor, I further propose a more specific one, which is THE DEGREE OF A PROPERTY IS THE AMOUNT OF OBJECTS, which can be illustrated by *I may have more luck* (authentic, from the BNC). The above event structure metaphor, joined by MORE IS UP, results

<sup>60</sup> In Radden (2000), the conceptual metaphor is formulated as AN ATTRIBUTE (PROPERTY) IS A POS-SIBLE OBJECT.

in a HIGHER DEGREE OF A PROPERTY IS A GREATER AMOUNT OF OBJECTS, which sanctions up in instances like (5–24) and (5–25).

This complex event metaphor gives (5-24) an alternative interpretation at a more schematic level than the domain of QUANTITY. In addition to a possible interpretation of 'more of quantity in terms of speed', *speed up* in (5-24) may alternatively mean 'a higher degree of speediness', and this result is brought about by a process initiated by the tr of *speed*. This schematic event structure account now renders the interpretation of (5-25) possible. Following the same line of argument, the combination of *slow up* may come to mean 'a higher degree of slowness' as a result of a speed reduction process.

Therefore, the experiential pattern MORE IS UP may be at play for (5-24) and (5-25), though in a highly abstract sense. In other words, what is at issue is not a real amount of entities but instead the intensity of a property metaphorically viewed as the amount of an entity.

The idea of relating the progress of an event to QUANTITY is not new. For instance, Lindner (1983: 194) insightfully proposed the idea of "abstract processed region", with which she argued that the progression of an event can be viewed as an abstract object processed, and that as the event unfolds, the abstract region gets larger. Citing Lindner, Boers (1994) similarly suggested that the use of upinvolved bringing the event to a degree of higher intensity on a scale of quantity. Following up on her proposal of processed region, Lindner argued that the goal state conveyed by completive up was reached as the processed region was congruent with, or closely approximated, the intrinsic capacity of the original abstract object. This observation corresponds to part of my previous claim in Chapter 4 that the endpoint of the GOAL-prominent up 'completive' may be specified by either a telic verb, a definite NP, or a PREPP in the co-text of up.

However, in spite of the above similarity, my analysis differs from Lindner's account in that I argue that the endpoint of the goal state is "subjectively" (Langacker 1985, 1987) and "contextually" (Cappelle 2005) determined. That is, I do not agree that the use of completive *up* necessarily has to involve a total completion of an event or a close approximation of the intrinsic event boundary. Instead, I propose that the goal state be subjectively and loosely defined and is inferable from contextual clues.

Let us return to the case of *slow up*, which was claimed to involve COMPLETION IS UP and to mean 'completive' from Lindstromberg's (1997: 188) point of view. In contrast, in my corpus, I do find instances of *slow up* that are modified by hedges such as *a little* or *a bit*, which are quite the opposite in meaning to the concept of total completion or approximation to the extreme claimed in the previous studies. Excerpts (5–26) and (5–27) are counterexamples against the previous analyses:

- (5-26) Sixty yards. Hitch could hear shouting from the other boat, though most of the words were indistinct. He saw one man motioning animatedly with his arms, as if to deflect the other boat from its route. Forty yards. 'Steady now,' Hitch said and Morton slowed up a little more.
- (5–27) I KNOW we went two-nil up quite early and three-nil up before half-time. Then the game slowed **up** a bit. But I scored the last two goals in the second half.

Although as (5-26) and (5-27) show, completive up can be modified by semantically contradictory hedges, this fact calls for a more schematic explanation than the previous analyses rather than a total rejection of the accounts. In most cases of completive up, the interpretation of going to the extreme of a process may hold if not otherwise specified, and Lindner and Lindstromberg are certainly right about that "default interpretation". But as we see in (5-26) and (5-27), the above generalization may not necessarily stand. These less typical examples can be incorporated to form a more satisfactory explanation only when the subjective and contextually-defined nature of completive up is taken into account.

Based on the above discussion, I take one further step to modify my previous analysis in Chapter 4. My revision first and foremost argues in line with Cappelle (2005) that the exact meaning of completive up is context-dependent, and that although in most cases, the particle does seem to mean 'to an extreme or to an approximation of the extreme' as Lindner (1983) and Lindstromberg (1997) claimed, the interpretation applies only to the prototypical situation. In order to accommodate less typical instances like (5–26) and (5–27), a more schematic definition for completive up needs to be sought.

To supplement my previous account, I propose the incorporation of an event structure metaphor that allows for a construal of the degree of a process as the amount of objects. Congruent with Lindner's (1983) and Boers' (1994) explanations, I establish a link between 'more' and 'completive', not via a direct involvement of the domain of QUANTITY but at a highly abstract level of event structure. The addition of the event structure metaphor facilitates the introduction of MORE IS UP, where the upper extreme or the event boundary is imposed by the immediate co-text, which may be elaborated by a definite NP, a PREPP, a telic verb, or even a degree adverb. As a process unfolds, the property associated with the processual predication becomes more intense and can be viewed as moving upward as the amount of abstract object increases.

The proposed account helps justify why up can be recruited as an aspectual particle in English. This account provides the conceptual motivation for why up has been chosen repeatedly in usage events, so that the directional adverb may undergo subjectification and is still able to retain its image-schematic content.<sup>61</sup>

<sup>61</sup> Up to this point, I have laid out the highly intricate association between 'more' and 'completion'. The whole picture presented thus far is more complex than what was simplistically shown in

## 5.3 'Happy'

Another figurative meaning in the corpus that involves cross-domain mapping is 'happy', which invokes the conceptual domain of EMOTION. Below, I discuss this usage cluster in terms of the three criteria of PP.

## 5.3.1 'Happy' and the Meaning Criterion

To attest to the status of 'happy' as a distinct sense, we need to take a look at some instances to confirm its additional meaning not present in the other senses. Excerpts (5-28) to (5-30) are typical:

- (5-28) Enough of all the gloom and doom. Have another drink, Motherham, and cheer up.
- (5–29) "And the biggest [o]p in the history of Ford Motors. My God, look at that grille; it's ugly as sin." She lightened **up** a bit with the banter.
- (5-30) Here's just the thing to liven up dull office meetings or family gatherings or to just scare the cat. The Vectron Ultralite flying saucer lifts off and flies without wires or tethers. [J] ust point the infrared controller (similar to your TV remote unit) at the Vectron, pull the trigger, and it will take off and hover.

In all the above excerpts, EMOTION is clearly present, which is prompted by the verb in the constructional schema of [V] - [UP]. The tr of up in (5–28), coded by *Motherham*, moves vertically higher in the domain of EMOTION and as a result becomes better in terms of mood. In (5–29) and (5–30), the figure that follows an upward trajectory is people's feeling and the surrounding atmosphere, which leads to a resultant state of a happier mood. Therefore, up 'happy' does form a distinct usage cluster that exhibits an additional meaning not present in the other established senses, and this satisfies the Meaning Criterion of PP.

## 5.3.2 'Happy' and its associated constructional schema

A structural commonality of 'happy' in the corpus is that it consistently appears in the construction of [V] – [UP]. In Chapter 4, I introduced a usage cluster of [V] – [UP] with only PATH profiled. I argue that 'happy' is similarly PATH-prominent as an extension from it.

Figure 5.3 as a third approximation. It should become evident that a pictorial representation will fail to do justice to the entirety of what we have covered. In addition, the complexity of the semantic network of *up* presented so far demonstrates the dynamicity of language in use, which calls into question the meaningfulness of a purely quantitative analysis. The discussion so far, after all, reveals the vagueness of sense boundaries, with borderline cases all over the place that may invoke multiple constructional schemas and may belong to multiple semantic categories.

#### 5 The Metaphorical Senses of Up

An important characteristic of 'happy' is that the meaning relies on its preceding verb as the autonomous predication that induces a domain mapping for concept elaboration. For *cheer up* in (5-28), *up* is the dependent predication and *cheer* the autonomous one, since as an adverb, up to a large extent invokes a verbal process that participates in it. In contrast, although the verb may also invoke a resultant state, its conceptual dependence on up is relatively weaker, since there are other more important roles (such as its arguments) that a verb may invoke. Therefore in (5–28), the verb *cheer*, which triggers EMOTION, induces a domain mapping in up for up to metaphorically represent the positive pole in the domain of EMOTION. In a similar vein, in the symbolic assembly of *lighten up* in (5–29), the autonomous predication of *lighten*, with its meaning being related to EMOTION, introduces this domain and creates the metaphorical reading for upto stand for a positive mood.<sup>62</sup> The metaphorical reading of up in the combination of *liven up* in (5-30) is similarly produced by the autonomous predication *liven*.<sup>63</sup> Therefore, 'happy' is indeed a distinct sense, based on the fact that this usage cluster shows an additional meaning not found elsewhere and that it invokes EMOTION triggered by the verb, which constitutes its own pattern of concept elaboration.

Below, I turn to another complex usage cluster that also involves a fuzzy boundary with 'completive'.

#### 5.4 'Good'

'Good' is another semantic category that I identified in the corpus, which involves GOOD IS UP in the domain of EVALUATION (Taylor 2003b: 339). The author proposes the experiential basis for 'good'—that people tend to desire more money and more food, and that the experiential association between more quantity and positive evaluation motivates the extension of 'good' from 'more'. I largely agree with the author's claim that 'good' is an extension from 'more,' and I further propose that the conceptual metaphor GOOD IS UP is essentially a schematic pattern of thought with culture-specific details. I argue that, in English, it may be true that GOOD IS UP is abstracted from the ideas of more money being positive, more food being positive, etc. But in a different

<sup>62</sup> One of the meanings of the verb *lighten* is 'to become more cheerful', according to *Merriam Webster Online* (Access date: Jan 25, 2010). In addition to HAPPY IS UP, the example of *lighten up* may also invoke the metaphor HAPPINESS IS LIGHT (Kövecses 1991).

<sup>63</sup> An interesting point is that the assembly of *liven up* is another clear case where *up* induces domain highlighting in the autonomous predication. With the meaning of its root *life* being 'a quality that differs a vital being from a dead one', the word *liven* is metonymically extended to mean 'a certain kind of manner of a vital being'.

language (and a different cultural community), the specific details of what counts as good is language– or culture-specific. In Chinese, for instance, the conceptual metaphor GOOD IS UP also exists, but in addition to food and money, the number of descendants and the amount of luck may also constitute part of the experiential basis for GOOD IS UP. Therefore, although the resultant abstracted pattern of thought is universal, the details of how this general pattern is motivated in a language are dependent on the specifics of that particular linguistic community.

### 5.4.1 'Good' and the Meaning Criterion

In the corpus, I identified a group of instances that reflect an additional meaning not present in the other semantic categories. (5-31) and (5-32) are typical.

- (5-31) I had so many clothes but my mother never said no to more. I was always keen on dressing up and going out to meet my friends.
- (5-32) Not to mention the words they need to describe manufacturing processes, distribution systems, schedules, and sales performance. So whether your students are studying for exams or brushing up their English for professional reasons, this dictionary will deliver the answers -- often before the question has even been asked!

In the above excerpts, the interpretation of up depends on the conceptual metaphor GOOD IS UP. In (5–31), the tr of up, which coincides with that of *dress*, also follows an abstract upward path in the domain of EVALUATION and finishes better-looking. Similarly, the tr of up in (5–32), *their English*, moves along the vertical dimension in the domain of EVALUATION so that it is evaluated to be more positive as a result.

Judging from the strong reading of 'good' that we saw in (5–31) and (5–32), this usage cluster does satisfy the Meaning Criterion of PP.

#### 5.4.2 'Good' and its associated constructional schemas

As can be seen from my analysis earlier in this chapter, no matter what grammatical construction up occurs in, the domain mapping is always induced by either an NP or the verb in its co-text. In the corpus, I also found such observation to stand for 'good', which I discuss below.

#### 5.4.2.1 An NP as the source of concept elaboration for 'good'

In my corpus, I found at least two types of grammatical constructions associated with up 'good': [V] - [UP] - [PREPP] and [V] - [UP] - [NP]. For both of these sub-schemas, an NP in the co-text of up always plays the vital role in introducing EVALUATION. Excerpts (5–33) to (5–35) exemplify this:

- (5-33) The training of probation officers could continue and be included in the Certificate of Qualification in Social Work and the Diploma in Social Work courses, but if these do not measure **up** to required standards, they will be replaced with [a new] training syllabus put out to tender in the educational market place.
- (5-34) The department is leading the work set out by President Obama to close the detention facility at the Guantanamo Bay naval base. And to ensure that policies going forward for detention, for interrogation and transfer of detainees live up to our nation's values.
- (5-35) Indeed, no sign possesses the power to win others' hearts quite like a heart-ruled Leo, and this month is full of possibilities to build **up** your reputation and cultivate new allies.

The instances (5-33) and (5-34) instantiate the GOAL-specifying [V] - [UP] - [PREPP], where the NP in the PREPP led by *to* induces a domain mapping from SPACE to EVALUATION. In (5-33), it is unclear whether it is the verb *measure* (which is what joins *up* to form a larger assembly) that prompts EVALUATION. But if we look at the autonomous NP that combines with the dependent predication *to* in the PREPP that follows, we see that that the domain mapping from SPACE to EVALUATION is induced by that particular NP, which is *required standards*. By the same token, in (34) we cannot be sure whether it is the verb that invokes EVALUATION, but it looks clear that EVALUATION in this instance is introduced by *our nation's values*, which is the autonomous predication that joins the dependent predication *to* in the PREPP.

Example (5–35) instantiates a PATH-prominent [V] - [UP], which involves an object NP associated with EVALUATION. In this particular instance, as up joins the verb *build*, neither of the predications introduces GOOD IS UP. But as the complex assembly is combined with another one, *your reputation*, domain mapping is induced by the autonomous NP, *your reputation*, in the dependent predication *build* up. Remember that the VPC *build* up appeared in my discussion of 'more', where an NP in the co-text triggers the domain of QUANTITY. If we compare those examples with (5–35), it is straightforward that in these cases, the interpretation of up is influenced by the domain triggered by the NP. This comparison highlights the role of the NP in understanding the semantics of up.

#### 5.4.2.2 The verb as the source of concept elaboration for 'good'

Between the two constructional schemas associated with 'good', I found that the PATH-prominent [V] - [UP] may contain a sub-group of usages that involves the verb as the source of concept elaboration. Specifically, I found that many verbs in this cluster contain an abstract meaning of 'to cause to become better'. Instances (5–31) and (5–32) presented above, and (5–36) below are such cases where the verbs invoke EVALUATION.

(5–36) The Sun newspaper is to set up a service called 'Hard Views' aimed at 'cleaning **up** and improving the standards of journalism in television.'

In (5–31), the verb *dress* 'put on outfit' frequently coincides with the purpose of making one better-looking or more presentable, and so invokes EVALUATION. It induces domain mapping in up, since the verb is the autonomous predication and the adverb the dependent one. Similarly, in (5–32), the verb *brush* 'apply brush to' often coincides with the idea of making something clean and pleasant to the eye. Given the A/D-alignment in the assembly, the verb triggers the domain transfer in up for the adverb to pick up an evaluative sense. Note that meanwhile, up also induces a domain highlighting in *brush* that creates a focus on the resultant state of the entity brushed being clean and presentable. The same conceptual operation happens to (5–36) as well, where in *clean up*, the asymmetry of conceptual autonomy and dependency allows *clean* to introduce EVALUATION to up and forms the source of concept elaboration for 'good'.

In addition to (5-31), (5-32) and (5-36), which are instances that typically prompt EVALUATION, I found instances that are less typically, if not peripherally, associated with this conceptual domain. The verbs in (5-37) and (5-38) are processes of communication, and their relation to EVALUATION is not as direct as in the above three instances. But these verbs may still serve as a valid source of concept elaboration for the evaluative meaning of up, even when the verbs are only distantly related to EVALUATION.

- (5–37) The Treasury Select Committee will have fun discussing the precise significance of that measure, which is another attempt to talk **up** the economy and persuade consumers that it is all right to spend now.
- (5-38) He was the picture of success. They often wrote him up in the newspapers.

In (5-37) and (5-38), the tr of up is the object NP taken by the verb, *the economy* and *him* respectively. The verbs of communication, which are *talk* and *write*, introduce EVALUATION and induce the domain mapping, based on the A/D-alignment. The domain mapping induces the tr to follow an upward path and to finish

vertically higher in the domain of EVALUATION, which contributes to the reading of the tr being positively evaluated as a result of such processes of reporting.

The discussion above shows that, in addition to the meaning not present in the other meanings, the semantic category of up 'good' does have its own pattern of concept elaboration. The source of the concept elaboration of 'good' is based either on an NP or on the verb in the co-text of up that serves as the autonomous predication, which induces domain mapping in up to create a metaphorical transfer from SPACE to EVALUATION. Therefore, since 'good' satisfies at least two criteria of PP, it has the status of a distinct sense.

#### 5.4.3 Between 'good' and 'completive'

Just as with the gray areas that I have addressed between 'completive' and some other meanings, I found a connection between 'good' and 'completive'. Here, the role of the GOAL-prominent [V] - [UP] - [PREPP] associated with 'good' is important. Remember that in (5–33) and (5–34), it is the NP in the PREPP following up that creates a domain mapping from SPACE to EVALUATION. But as we look into the image-schematic structure that underlies the constructional schema, we see that an endpoint focus of the PATH is specified by the PREPP led by to. In other words, this grammatical construction imagistically represents that the tr of up, by moving vertically higher in the domain of EVALUATION, reaches an endpoint that is linguistically elaborated by the PREPP. Thus, [V] - [UP] - [PREPP] can be said to invoke two possible semantic representations—possibly a kind of 'completive' based on its imagistic structure, or a kind of 'good,' given the metaphorical mapping that is induced by the NP in the PREPP.

The second overlap that I have noticed in my corpus between 'good' and 'completive' arises again with the presence of past participles, such as in (5-39) and (5-40) below:

- (5-39) Having cleaned **up** at Lingfield, the Muddles took a circuitous route to Southwell to follow their dream of building a new super track.
- (5-40) But, you know, they- they-[they've] dressed **up** for their jobs. They look well. They look like [they're] interested.

In (5-39) and (5-40), the verbs *clean* and *dress* invoke EVALUATION, and as a result, a domain mapping from SPACE to EVALUATION is induced in *up*. But a reading of 'completive' is also felt. The working is similar to what we saw in 'accessible', which overlaps with 'completive' via constructions that contain a past participle. The same holds between 'good' and 'completive'. In particular, (5-39) and (5-40) can on one hand be seen as a kind of 'good', in the sense that the verbs

that precede up trigger the domain of EVALUATION to create a domain mapping that changes the reading of up. On the other hand, the examples can be seen as a kind of 'completive', since the past participle that precedes up imposes a posterior construal that highlights the GOAL-prominent feature of the trajectory for up.

## 5.5 Summary of the chapter

Summarizing this discussion of the metaphorical senses for *up*, Table 3 lists the distinct patterns of concept elaboration for each of the metaphorical senses:

	Grammatical profiling	Concept elaboration
'Accessible'		Upward trajectory instantiated in the domain of COGNITION
'More'		Upward trajectory instantiated in the domain of QUANTITY
'Нарру'		Upward trajectory instantiated in the domain of EMOTION
'Good'		Upward trajectory instantiated in the domain of EVALUATION

 Table 3: Distinct patterns of concept elaboration for the metaphorical senses of up

A comparison between the senses discussed in Chapter 4 and Chapter 5 reveals that the extension of meaning from the prototypical sense of 'vertically higher' follows two distinct, though often intertwined, mechanisms. Along one path, for 'approaching' and 'completive,' the meaning extension finds its root in the basic cognitive ability of viewpoint shift and in the attenuation of the physical sense. The source of concept elaboration is imagistic in nature for this route. On the other hand, the other meanings are extended by means of domain mapping that occurs in the process of joining smaller symbolic assemblies into a larger complex one. The source of concept elaboration comes from an autonomous predication in the co-text of up, which may be the verb that combines with up; an NP as an argument of the verb; or the NP in the PREPP. Note that the two paths may merge with each other and may not be clear-cut. I discussed in Chapter 5 that 'completive' and some of the metaphorical meanings overlap in intricate ways. Such an overlap of semantic categories illustrates the fact that the above two cognitive mechanisms, i.e. image-schematic transformation and cross-domain mapping, operate not in an exclusive manner but in conjunction. In many cases where a cross-domain mapping and the GOAL-prominent feature co-exist at the conceptual level, it is usually the metaphorical reading that prevails, with the 'completive' reading remaining imminent unless it is somehow profiled (e.g. by a past participle).

These two different cognitive mechanisms, as well as the intricate semantic connections between 'completive' and the other senses, came to light only as a result of the employment of authentic data, which enables us to identify the bridging context between senses. My analysis also highlights that we should understand a sense as a conceptual commonality abstracted from a wide variety of usage events, which subsumes minor groups of usage events that can be described in terms of constructional schemas. With the discussions in Chapter 4 and Chapter 5, I have demonstrated that this way of linguistic description allows us to fully explore the semantic patterns of a lexical item and to identify possible connections between senses by way of breaking down distinct senses into minor groups of symbolic assemblies.

## 6 THE CORE SENSES OF SHÀNG

With a view to cross-linguistic comparison, the current chapter is devoted to an analysis on how the positive pole of the vertical dimension can be linguistically manifested in Chinese. In particular, the constructional schema which I focus on is [V] - [SHANG], for the following reasons. First, in all major English-Chinese dictionaries, *shàng* is listed as the first entry to *up*, which ensures the status of *shàng* as the most suitable counterpart of *up* in Chinese. However, as we look into the corpus, we see that *shàng* occurs in a variety of constructions, such as [NP] - [SHANG], [V] - [SHANG], [SHANG] - [NP], etc. Among all these constructions, only <math>[V] - [SHANG] involves both the target words and a verb similar to the English VPCs. Secondly, although in most cases, *shàng* is immediately followed by an NP, it should not be seen merely as a postposition. Rather, the verb and *shàng* form a complex structure that consists of two integrated components, the meaning of which is not entirely compositional, which makes [V] - [SHANG] comparable to English VPCs.<sup>64</sup>

Below, I will analyze my corpus data using Evans's (2004) methodology of sense distinction with respect to three criteria, and I will introduce the senses that are not derived by conceptual metaphor, i.e. the senses that do not involve cross-domain mapping. I will continue to use Langacker's (1987, 2008) notion of conceptual autonomy and dependence in forming symbolic assemblies, which I used in the analysis on *up*. Due to space limitations, the metaphorical senses of *shàng* are not discussed in this study.

<sup>[</sup>V] – [SHANG] is a global schema which can be instantiated by several local schemas, such as [NP1] – [V] – [SHANG] – [NP2], [NP] – [V1] – [SHANG] – [V2], etc., with the global schema always immanent in the local manifestations.

## 6.1 Core senses of shàng and the Meaning Criterion

Based on Evans's (2004) methodology, I identified in the corpus the following six core senses for *shàng* which do not involve a cross-domain mapping: 'vertically attained'; 'vertically higher'; 'forward'; 'attached'; 'completive'; and 'inceptive'.<sup>65</sup> In this section, I expound on these senses and how they meet the Meaning Criterion.

#### 6.1.1 'Vertically attained'

'Vertically attained' involves the vertical dimension in the conceptual domain of space. A distinct characteristic of the meaning is that it has a concrete and specific location as its lm, which distinguishes it from 'vertically higher'. In addition, some effort typically needs to be made by the tr in order to attain the lm. Excerpts (6-1) and (6-2) are typical:

(6-1)	擔心	這場雪		太	大,	屋頂
	dānxīn	zhè-chăr	ıg-xuĕ	tài	dà	wūdĭng
	worry	this-CL-	snow	too	big	roof
	吃不住,		待會	我	爬上	屋頂
	chī-bú-zhù		dàihuì	wŏ	pá-shàng	wūdĭng
	contain-NE	G-PFV	later	Ι	climb-SHANG	roof
	去	鏟一鏟		雪。		
	qù	chăn-yì-	chăn	xuě		
	go	shovel-T	NTV-RED	snow		

"(I) worry that the snow is too heavy for the roof to take. Later, I'll climb onto the roof to shovel the snow."

The usage cluster of 'vertically attained' could be seen as an instantiation of 'vertically higher' in a specific context. However, I choose to present it as a distinct sense for four reasons: First, this particular meaning is very productive not only in the constructional schema of [V] – [SHANG] but also in that of [NP] – [SHANG], which constitutes its own distinct structural dependency, and makes the sense meet the Grammatical Criterion of PP. Second, as will be shown in this chapter, this usage cluster plays a pivotal role in the emergence of 'attached' and two subsequent senses of 'completive' and 'inceptive'. Third, 'vertically attained' and 'vertically higher' are based on distinct "conceptual archetypes" (Langacker 1999, 2006, 2008), traces of which always remain in the process of semantic extension. Finally, from a cross-linguistic point of view, the usage cluster of *shàng* 'vertically higher' can be roughly translated into *up to* or *into* in English, whereas *shàng* 'vertically attained' into *onto*, which reveals their underlying conceptual difference. Another point to make here is that the last three meanings are all "aspectual" in nature (Su 1997); they portray how a situation is viewed by the speaker. The sense of 'inceptive' was also noticed and discussed in Jin (2005). In addition, the three meanings share a grammatical profile, which I will cover in 6.3.

(6-2)	完工	的	時候,	他	登上	
	wángōng	de	shíhòu	tā	dēng-shàng	
	finish	LK	when	he	mount-SHA	NG
	城牆,	從	東門	到	北門,	巡視了
	chéng qiáng	cóng	dōng mén	dào	běi mén	xúnshì-le
	city wall	from	East gate	to	North gate	patrol-PFV
	一周。					
	yì zhōu					
	one circle					

"When (the construction work was) finished, he climbed onto the top of the city wall, and patrolled from the East Gate to the North Gate to examine (the construction)."

Shàng in (6–1) and (6–2) exhibits a distinct meaning. In particular, the verbs  $p\dot{a}$  'climb' and  $d\bar{e}ng$  'mount' imply a certain effort needed in order for the tr to attain a specific surface that is vertically higher, as the lm of the verbal process. With the distinct meaning shown above, 'vertically attained' satisfies the Meaning Criterion.

Furthermore, 'vertically attained' and 'vertically higher' are different in terms of the NP that follows. (6–3) below is a typical instance of 'vertically attained' and (6–4) is typical of 'vertically higher'; both involve the construction of *shēng-shàng* 'rise-SHANG,' with different kinds of GOAL.

(6-3)	從	海	中	升上	海面	登陸
	cóng	hăi	zhōng	shēng-shàng	hăimiàn	dēnglù
	from	sea	LOC	rise-SHANG	sea surface	land
	時,	拍	岸	的	浪潮	變
	shí	pāi	àn	de	làngcháo	biàn
	when	pat	shore	LK	waves	become
	兇	了。				
	xiōng	le				
	mean	CRS				

"When (everyone) went up from under to the sea surface, the waves that lapped the shore became stronger."

#### 6 The Core Senses of Shàng

(6-4)	那個	少女	就	在	風雨	中,
	nà-ge	shàonữ	jiù	zài	fēngyŭ	zhōng
	that-CL	girl	PRT	LOC	storm	LOC
	升上	天空		不見	了。	
	shēng-shàng	tiānkōng		bújiàn	le	
	rise-SHANG	sky		disappear	CRS	

"In the storm, the girl then rose to the sky and disappeared."

A comparison between (6-3) and (6-4) reveals that the nature of the NP after [V] – [SHANG], i.e. the GOAL, bears an influence on the meaning of *shàng*. In particular, the GOAL in (6-3), *hǎimiàn* 'sea-surface,' is a specific location that elaborates the endpoint of the trajectory, which is attained by the rising tr; this generates the interpretation of that example as 'attained'. In contrast, the GOAL in (6-4), *tiānkōng* 'sky', is a highly general location, so the reading of the tr attaining the endpoint of a trajectory is weak; this constitutes a semantic distinction between 'vertically higher' and 'vertically attained'.

#### 6.1.2 'Vertically higher'

This cluster of usages denotes a figure moving upward in the domain of SPACE. The endpoint of the trajectory is vague, and usually involves a general location such as  $ti\bar{a}n$  or  $ti\bar{a}nk\bar{o}ng$  'sky'. Examples (6–4) above and (6–5) below illustrate this cluster.

(6-5)	跑	個	幾	步,	就	
	păo	ge	jĭ	bù	jiù	
	run	DIM	several	step	PRT	
	連人帶傘,			輕飄飄		地
	lián-rén-dài	-săn		qīng-piāo-piāo		dì
	with-persor	n-bring-pa	rachute	light-bu	oyant-RED	ADV
	浮上		天空。			
	fú-shàng		tiānkōng			
	float-SHAN	IG	sky			

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

As can be seen in (6-4) and (6-5), this usage cluster of *shàng* denotes an upward trajectory with a generic endpoint instantiated in SPACE. In (6-5), the primary figure travels along an upward trajectory in SPACE and ends up in a general location, which is elaborated as *tiānkōng* 'sky'. Similarly, the tr in (6-4), which is *nà-ge shàonů* 'that girl', follows a vertical trajectory up to a generic location. In these examples, *shàng* exhibits a distinct meaning of moving upward in SPACE, which allows this usage cluster to meet the Meaning Criterion of PP.

#### 6.1.3 'Forward'

The meaning of 'forward' is similar to 'vertically attained' and 'vertically higher', in that the three senses all demonstrate a strong spatial sense. However, this meaning is different from the other two in that it does not involve verticality in a completely objective sense. Instead, the sense of verticality is present only from a certain "onstage" (Langacker 1990) point of view. Instances (6–6) and (6–7) are typical of this meaning:

(6-6)	幹員	發覺	郭長榮		準備	逃逸,
	gànyuán	fājué	guō chángr	óng	zhŭnbèi	táoyì
	agent	find	Guo Chang	grong	ready	escape
	立即	擁上,		逮捕	郭	嫌。
	lìjí	yŏng-shàng	g	dàibŭ	guō	xián
	immediate	swarm-SH	IANG	arrest	Guo	suspect

"(When) the agent(s) found that Guo Changrong was about to escape, (they) immediately swarmed to arrest the suspect, Mr. Guo."

(6-7)	浪花	沖來	時,	我	拔腿就跑,
	lànghuā	chōng-lái	shí	wŏ	bátuĭ jiù păo
	wavelet	wash-come	e when	Ι	fleed immediately
	浪花	退走	時,	我	也
	lànghuā	tuì-zŏu	shí	wŏ	уĕ
	wavelet	back-away	when	Ι	also
	跟著,		追上去		
	gēn-zhe		zhuī-shàng	g-qù	
	follow-IPF	W	chase-SH	ANG-go	

"When wavelets came toward me, I fled immediately, and when wavelets went away, I followed and chased them..."

In these excerpts, the trajectories of the primary figures are both horizontal, not vertical. As can be seen in (6–6), the trajectory of the primary figure, ganyuan 'agent,' is not to be defined on the vertical plane but the horizontal one. Moreover, the trajectory of the primary figure in (6–7),  $w\delta$ , is not vertically upward but may even be slightly downward, since the tr is moving in the same direction as the wavelet subsiding toward the sea. In addition to the non-vertical nature of the trajectories, shang in (6–6) and (6–7) encode a forward motion of the tr, which semantically distinguishes this particular usage cluster from 'vertically attained' and 'vertically higher'; this enables this sense to satisfy the Meaning Criterion.

However, the establishment of the semantic category begs the question: How can we experientially account for the development of this sense? What is the motivation for the semantic extension from 'vertically higher' to 'forward'?

I would argue that the experiential motivation that serves to couple an upward path with the forward motion of a moving figure is the notion of "Interactive Focus" (Lindner 1983), the region in front of one's body measured from the height of one's hand to one's eyes. In Lindner's and my analysis in Chapter 5, this region serves as the experiential motivation that makes possible the semantic extension from 'vertically higher' to 'accessible' for up. However, I argue that in Mandarin Chinese, the sensory-motor salience of Interactive Focus serves to associate UP not only with the notion of perceptual and cognitive accessibility but also with forward motion. In particular, the experiential motivation goes as follows: if something locates in the perceptually salient region of a moving figure's Interactive Focus, then the object is not only in his sight, i.e., in proximity to the upper part of the moving figure's body, but also in front of him and also in his direction of motion. Note that the above experiential connection between UP and a moving figure's FRONT/FORWARD is embodied, given that our eyes are located in our upper body and that we must watch where we are headed as we move.

Let us consider (6–6) and (6–7) again to illustrate this point. In (6–6), the GOAL of the motion prompted by *yŏng-shàng* 'swarm-SHANG' is the suspect, with the forward motion made by *gànyuán* 'agent' to attain the GOAL, which is both in their direction of motion and perceptually salient to them. Similarly, the tr in (6–7), which is  $w\check{o}$  'I,' makes an attempt of forward motion to reach the GOAL, encoded as *lànghuā* 'wavelet', which is both in front of and perceptually salient to the trajector's Interactive Focus.

In addition, note that this coupling of UP and FRONT/FORWARD cannot be achieved via the default, or offstage, point of view, but needs to be made via an onstage one. In the usage cluster of 'forward,' the speaker always reports the motion with *shàng* by identifying himself with the onstage moving tr, in (6–6) with *gànyuán* and in (6–7) with  $w\check{o}$ , and this perspective shift is comparably achieved

via the cognitive mechanism of "self-projection" (Ikegami 2008), similar to what we have seen in the sense of 'approaching' for up.<sup>66</sup>

### 6.1.4 'Attached'

The fourth meaning that I identified in the corpus is 'attached', which exhibits a meaning that is not present in the previous clusters. In particular, the use of *shàng* in this semantic category underscores the resultant state of a process, where something is attached to a typical SURFACE. (6-8) and (6-9) instantiate this meaning:

(6-8)	房屋 <i>fángwū</i> house	外, <i>wài</i> outside	都 <i>dōu</i> all	刷上 <i>shuā-shàn</i> brush-SH	eg IANG	不同 <i>bù tóng</i> different
	的 de LK	顏色, <i>yánsè</i> color	看起來 <i>kàn-qĭlái</i> look-IPFV		有點 <i>yŏudiăn</i> a little	像 xiàng LK
	童話 <i>tónghuà</i> fairy tale	世界。 <i>shìjiè</i> world				

"Outside of (the) houses is/was painted with different colors, (which) look like a fairy-tale world."

(6-9)	報名	可	用	明信片,	寫上
	<i>bàomíng</i>	kě	<i>yòng</i>	<i>míngxìnpiàn</i>	<i>xiĕ-shàng</i>
	register	MOD	use	postcard	write-SHANG
	姓名、	年齡、	地址、	性別、	電話。
	<i>xìngmíng</i>	<i>niánlíng</i>	<i>dìzhĭ</i>	<i>xìngbié</i>	<i>diànhuà</i>
	full name	age	address	gender	phone

"(To) register, (you) may use a postcard, and write your full name, age, address, gender and phone number (on it)."

As can be seen in (6-8) and (6-9), this usage cluster exhibits an additional meaning that is not seen in the previous senses. In (6-8), *shàng* highlights the

A comparison between up 'approaching' and *shàng* 'forward' reveals that both involve an onstage vantage point between the usage clusters, and this shared feature suggests an important role played by the vantage point in the study of lexical semantics. A cross-linguistic comparison as to how the involvement of an onstage vantage point can motivate semantic extensions from the same conceptual substrate would be an interesting pursuit. I will return to this issue in Chapter 8.

result of the verbal process of  $shu\bar{a}$  'brush', so that the product  $y\acute{a}ns\acute{e}$  'color' is attached to the wall of the house as a prototypical surFACE. Similarly in (6–9), the verbal process of  $xi\check{e}$  'write' creates characters, with the resultative shang denoting that these characters are attached to  $m\acute{n}gxinpian$  'postcard' as a typical surFACE. Therefore, the distinct meaning of an entity being attached to a prototypical surFACE allows the usage cluster of 'attached' to meet the Meaning Criterion of PP.

While this cluster of images satisfies the Meaning Criterion, it is also essential to discuss the possible connection between 'attached' and the other meanings in the semantic network. Accordingly, we may ask whether 'attached' is an extension from another meaning, and in cases where it is, what motivates the semantic extension.

A look into the corpus reveals the possible connection between 'attached' and 'vertically attained'. As we saw in 6.1.1, the meaning of 'vertically attained' involves a surFACE with which the tr finally gets into physical contact and on which the tr can stay. I argue that this element remains crucial in understanding 'attached'. For instance,  $w\bar{u}d\bar{t}ng$  in (6–1) and *chéngqiáng* in (6–2) are both prototypical surfaces with which the tr of the verbal process comes into contact. Such a surFACE is also instantiated in (6–8) as *fángwū* and as *míngxìnpiàn* in (6–9). Therefore, the two meanings both invoke a SURFACE.

(6–10) is another example taken from the corpus, which may illustrate the possible route of semantic extension from 'vertically attained' to 'attached':

(6-10)	看著	兒子	哀求	的	眼神,	
	kàn-zhe	érzi	āiqiú	de	yănshén	
	look-IPFV	son	beseech	LK	look	
	葉三娘		低了頭		取下	
	yè sānniáng		dī-le-tóu		qŭ-xià	
	Ye Sanniang		lower-PFV-ł	nead	take-do	wn
	已經	戴上		頭頂	的	斗笠
	yĭjīng	dài-shàng		tóudĭng	de	dŏulì
	already	wear-SHA	NG	head	LK	leaf hat

"As she saw the beseeching look in her son's eyes, Ye Sanniang lowered her head and took down the leaf hat that she had been wearing on her head..."

The *shàng* in (6–10) is ambiguous between the readings of 'vertically attained' and 'attached'. On one hand, this instance of *dài-shàng* 'wear-SHANG' can be understood to involve a tr, elaborated as *dŏulì* 'leaf hat', which has been sitting on the top of Ye Sanniang's head as a result of vertical elevation—meaning this usage can be interpreted as an instantiation of 'vertically attained'; on the other hand, the tr in this instance can also be construed as simply attached to the top

of Ye Sanniang's head, with the head serving as a SURFACE, hence the reading of 'attached'. For contrast, consider the constructed instance below, which also involves the construction of *dài-shàng*,

(6-11)	看著	兒子	哀求	的	眼神,
	kàn-zhe	érzi	āiqiú	de	yănshén
	look-IPFV	son	beseech	LK	look
	葉三娘		戴上		斗笠
	yè sānniáng		dài-shàng		dŏulì
	Ye Sanniang		wear-SHAN	NG	leaf hat

"As she saw the beseeching look in her son's eyes, Ye Sanniang took down the leaf hat..." (constructed)

The main difference between (6-10) and (6-11) is the nature of the NP immediately following the construction of *dài-shàng*. In (6-10), the NP is instantiated by *tóuding* as a location, so the reading of attaining a vertical goal is more prominent. In contrast, the NP following *shàng* in (6-11) is instantiated by a thematic patient instead of a location, so the reading of attaining a vertical goal is weaker, which makes (6-11) a less typical case of 'vertically attained'.<sup>67</sup> A comparison between these two examples constitutes a case of "attenuation" (Langacker 1999), with the sense of vertical elevation having faded away, leaving behind only the conceptual content of ATTACHMENT TO A SURFACE. I will return to this point in Chapter 7.

## 6.1.5 'Completive'

The fifth meaning identified in the corpus involves less conceptual content than 'attached' and pertains to the speaker's construal of a situation. Specifically, *shàng* in this group of [V] – [SHANG] highlights the finish of a physical process denoted by the verb, in which two entities come into contact. For instance, *shàng* in (6–12) and (6–13) codes the endpoint of such a verbal process:

<sup>67</sup> Here, I only show the possibility of 'vertically attained' and 'attached' being related by considering pairs like (6–10) and (6–11). The issue of how and why a difference in the following NP can induce semantic extension will be addressed as I discuss the concept elaboration of *shang*.

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(6-12)	皆	門	快要	關上		或
	dāng	mén	kuài yào	guān-shàng		huờ
	when	door	about to	close-SHAN	G	or
	正在	合攏	時,	千萬	別	進出。
	zhèng zài	hélŏng	shí	qiānwàn	bié	jìn-chū
	IPFV	join	when	certainly	NEG	enter- go 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."

(6-13)	白兔 <i>báitù</i> rabbit	笑得 <i>xiào-dé</i> laugh-PFV		嘴唇 <i>zuĭchún</i> lip	都 dōu PRT	裂開 <i>liè-kāi</i> split-open
	了, le CRS	一直 <i>yìzhí</i> until	到 <i>dào</i> to	現在 <i>xiànzài</i> now	還 <i>hái</i> still	沒有 <i>méiyŏu</i> NEG
	合上。 <i>hé-shàng</i> come toge	ether-SHANG				

"The rabbit kept laughing until its lips split, and its lips have still not come together."

Compared to what we have seen in the typical instantiations of 'attached', (6-12) and (6-13) only involve two entities entering into contact with each other, neither involving a typical SURFACE.<sup>68</sup> In particular, in (6-12), *shàng* denotes the resultant state of two objects being in contact, which is coded by the verbal process of *guān* 'close'. This instance is a warning against entering the elevator before the doors of an elevator are still in the middle of coming into a state of contact, i.e. before the endpoint of the closing process of the doors. In (6-13), *shàng* similarly denotes the endpoint of the verbal process, *hé* 'come together,' where the tr, *zuĭchún* 'lips,' are still in the middle of the ongoing process of coming into

Some might argue that the NPs in the above examples, *mén* and *zuichún*, could be associated with surFACE, which would undermine the validity of my claim. However, my point here is that, used with a verb of closing, surFACE is not the most prominent feature of *mén* or *zuichún*. Recall that in Chapter 5, I discussed Croft's (1993) insight that a dependent predication can trigger a metonymic extension in an autonomous predication. Now we see that for an autonomous predication like *mén* or *zuichún*, different dependent predications can induce different degrees of domain highlighting. For instance, the element of surFACE receives more attention in the symbolic assembly of *zuichún-shang yǒu dōngxī* 'lip-SHANG exist something' than that of *hé-shang zuichún* 'come together-SHANG lips.' Therefore, my point is simply that for an instantiation of [V] - [SHANG] - [NP], where *shang* means 'completive', the element of surFACE of the NP as the autonomous predication is not brought to immediate focus but only remains in the conceptual base.

proximity. Examples (6–12) and (6–13) show that the distinct meaning of contact (without involvement of a prototypical SURFACE) allows this meaning to satisfy the Meaning Criterion.

As for the route of meaning extension, I consider 'completive' an extension from 'attached'. As an illustration of this, consider (6-14), which is a typical instance of 'attached' against its constructed counterpart (6-15), where the reading of 'attached' is weaker and is therefore ambiguous between 'attached' and 'completive'.

(6-14)	我	就	用	一張	紙,	寫上
	wŏ	jiù	yòng	yì-zhāng	zhĭ	xiě-shàng
	Ι	PRT	use	one-CL	paper	write-SHANG
	「媽媽	過	節	快樂」	六個	字。
	māma	guò	jié	kuàilè	liù-ge	zì
	mother	pass	holiday	happy	six-CL	character

"I then used a sheet of paper and wrote on it six characters: Happy Holiday, Mom!"

(6-15)	我	寫上		「媽媽	過	節
	wŏ	xiě-shàng		māma	guò	jié
	Ι	write-SHA	NG	mother	pass	holiday
	快樂」	六個	字。			
	kuàilè	liù-ge	zì			
	happy	six-CL	character	r		

"I wrote six characters: Happy Holiday, Mom!"

A comparison between (6-14) and (6-15) reveals a difference in the immediate co-text of *shàng* and the conceptual content prompted by the co-text. In (6-14), surface is linguistically elaborated by *yòng yì-zhāng zhǐ* 'use one-CL paper', whereas in (6-15), the above co-text is omitted and remains only in the conceptual base. As a result, the involvement of surface in (6-15) becomes only latent compared to its unabridged counterpart, which results in an ambiguity between 'attached' and 'completive'.

In addition to the above pragmatically driven change, a gradual shift at the conceptual level may also account for the extension from 'attached' to 'completive'. If we take a look at the above instantiations of 'completive', including the doors coming toward each other in (6-12) and one's lips coming together in (6-13), at first glance these processes do not seem to involve a typical surface. However, if we consider the endpoint of the above processes, viz. a door closed or lips closed, there exists a resultant surface in a loose sense. In particular, as

a door fits into its frame, the two objects together form a surface, and after one's two lips are brought together, the gap between the upper and the lower lips disappears into a surface. Therefore, I consider the above instantiations of 'completive' to be extensions from prototypical instantiations of 'attached', with the only difference being the degree of prototypicality of the SURFACE involved.<sup>69</sup>

#### 6.1.6 'Inceptive'

'Inceptive' is the sixth meaning that I identified for [V] – [SHANG]. This usage cluster is purely aspectual in nature, reflecting how a situation is viewed. *Shàng* in this semantic category serves to indicate the inception of a state and the continuation of that particular state.<sup>70</sup> In other words, it highlights the beginning, rather than the endpoint, of a process. Excerpts (6–16) and (6–17) are typical of this meaning:

(6-16)	萬一	他	追上了	別的	女孩,		
	<i>wànyī</i>	<i>tā</i>	<i>zhuī-shàng-le</i>	<i>bié de</i>	<i>nǚhái</i>		
	what if	he	chase-SHANG-PFV	other	girl		
	或者是	我	愛上	你,	那		
	<i>huòzhěshì</i>	wŏ	<i>ài-shàng</i>	<i>nĭ</i>	nà		
	or	I	love-SHANG	you	then		
	怎麼辦? <i>zěnmebàn</i> what to do						
	"What if he	met ano	ther girl or if I fell in lo	ve with vo	u then		

"What if he met another girl, or if I fell in love with you, the what shall (we) do?"

(6-17)	對	佛法	有了	更	進一步	的
	<i>duì</i>	<i>fófă</i>	<i>yŏu-le</i>	<i>gēng</i>	<i>jìnyíbù</i>	de
	about	Buddhism	have-PFV	more	further	LK
	認識,	她	才	瞭解	其中	意涵
	<i>rènshì</i>	<i>tā</i>	cái	<i>liǎojiě</i>	<i>qízhōng</i>	<i>yìhán</i>
	understanding	she	PRT	know	within	meaning

<sup>69</sup> In this sense, 'completive' can be viewed as an extension from 'attached' as a consequence of "semantic attenuation" (Langacker 1999), with the conceptual element of SURFACE being gradually stripped away. I will come back to this point in Chapter 7.

The above definition of inceptive aspect is based on Smith (1997) and Xiao and McEnery (2004).

並	逐漸	迷上	佛學。
bìng	zhújiàn	mí-shàng	fó-xué
and	gradually	addict-SHANG	Buddhist-study

"After she had more thorough knowledge of Buddhism, she came to understand its real meaning, and was getting more and more addicted to the study of Buddhism."

In both of the above examples, *shàng* denotes the inception of a mental state coded by the verb. In (6–16), *shàng* encodes the beginning of the verbal process of *ài* 'love', with the symbolic assembly of *ài-shàng* meaning someone entering the mental state of being in love with another and remaining in that state. Likewise, *shàng* in (6–17) codes the inception of the psychological state of *mi* 'addict', i.e. the sentential subject being attracted to the study of Buddhism and remaining in that mental state. The above two instances show the meaning of someone deep in a mental state, which is different from 'completive'. The meaning 'inceptive' therefore meets the Meaning Criterion.

Besides satisfying the Meaning Criterion, this sense bears a possible connection with 'completive'. Consider the construction  $gu\bar{a}n$ -shàng in (6–18):

(6-18)	業者	將	鐵門	關上,	繼續
	yèzhě	jiāng	tiěmén	guān-shàng	jìxù
	owner	DSPL	gate	close-SHANG	continue
	營業。				
	yíngyè				
	run busi	ness			

"The owner (of the casino) kept the gate shut and resumed business."

Juxtaposed with Excerpt (6–13), which is a typical instantiation of 'completive', this instantiation of  $gu\bar{a}n$ -shàng has both a completive and an inceptive reading. In other words,  $gu\bar{a}n$ -shàng in (6–18) is ambiguous between 'finishing the process of closing the door', which counts as an instance of 'completive', and 'with the door remaining in the state of being shut', a case of 'inceptive'. Given this token of  $gu\bar{a}n$ -shàng with a dual reading, it is justifiable to see a possible relation between 'completive' and 'inceptive' for shàng. However, this claim begs the question: if the two meanings are obviously antonymous, in what way can they relate to each other?

I argue that difference in profiling is what causes the antonymous dual readings of (6–18). In (6–18), the sentential subject, which is encoded as  $y\dot{e}zh\check{e}$ , is engaged in a series of processes. The sentential subject first makes an attempt to close the gate, then completes the process of closing, then resumes business.



Figure 6.1: a) The reading of 'completive'; b) The reading of 'inceptive'

In this series of processes, if we choose to limit our attention to the process of closing and its endpoint, then *shàng* clearly denotes the finish of that process, which results in the exclusively completive reading that we saw in (6–13). On the other hand, if we choose to focus on the verbal process of resuming business, then *shàng* not only denotes the endpoint of the closing process prior to resuming business, but also codes the onset of the state of the door being shut. Figure 6.1a and 6.1b below show how these alternative ways in allotting attention to an identical conceptual base can give rise to two completely antonymous readings. The single line represents the process of closing the door, the circle stands for the temporal point at which the door is closed, and the double line symbolizes the process of resuming business. Boldness stands for profiling and the direction of the arrow for the passage of time.

Thus the conceptual connection of 'inceptive' with 'completive' can be established by attributing the antonymy of the two readings to the difference in the windowing of attention to an identical conceptual base. Therefore, 'completive' and 'inceptive' for *shàng* may be considered two sides of the same coin.<sup>71</sup>

However, in addition to the shift in focus, two other important factors are also at play in explaining for the antonymy: verb types and shared conceptual content. First of all, as we have discussed, the 'completive' meaning occurs with verbs that create physical contact between objects, while the 'inceptive' meaning collocates with stative verbs of mental affinity. These two different types of verbs profile different bits of the identical conceptual base of CAUSE, BECOME and STATE (Croft 1990). On one hand, verbs of physical action like guan 'close' and he' 'bring together' code the CAUSE portion of the conceptual scene, with *shàng* coding the end of that particular bit. On the other hand, stative verbs like ai 'love' and mi 'addict(ed)' linguistically elaborate the STATE portion of the entire scene, with *shàng* coding the inception of the mental state. Therefore, we can see that the shift in conceptual profile shown in Figure 6.1 is triggered by a shift from action to stative in terms of verb types and that *shàng* is 'completive' with respect to the CAUSE, and 'inceptive' relative to the STATE.

<sup>71</sup> The issue of a lexical item developing two opposite meanings has been extensively reported in the literature. Interested readers are referred to Chen and Chang's (2010) research on Chinese *xiang*, Lu's (2017b) analysis of English *in*, and Rhee's (2000) discussion of various examples from Korean, Chinese, Old French and English.

The shared conceptual element of CONTACT may also provide an explanation for the extension from 'completive' to 'inceptive'. Specifically, the repertoire of the verbs that collocate with 'inceptive' is associated with the notion of mental affinity, which can be found, in a schematic manner, in the conceptual element of CONTACT inherent in the usages of 'completive'. As I have shown, for the meaning of 'inceptive,' verbs that occur with *shàng* are verbs in the mental domain, including *ài* 'love,' *mí* 'addict,' etc., which suggest the notion of mental or emotional closeness. Note especially that not all verbs in the mental domain fit into the schema of [V] – [SHANG], since a verb that does not suggest mental closeness, such as *hèn* 'hate', cannot elaborate the above schema. Therefore, the key notion of closeness, instantiated respectively in a concrete and an abstract domain, is a commonality shared by 'completive' and 'inceptive'. This schematic commonality is what allows for the semantic extension to take place. I will return to this point in the discussion on the concept elaboration of 'inceptive'.

So far, I have introduced all the six core meanings identified in our corpus, and I have shown how these meanings meet the Meaning Criterion and how they are interrelated. Below, I will discuss the sanctioning sense in the semantic network in 6.2, and discuss these senses with respect to the Grammatical Criterion and the Concept Elaboration Criterion in terms of constructional schema in 6.3.

#### 6.2 Decision of the sanctioning sense

In this section, I employ Evans' (2004) criteria of PP to determine the sanctioning sense in the semantic network of *shàng*.

For the first criterion of earliest attested meaning, according to 搜詞尋字  $s\bar{o}u$  *cí xún zì*, an online Chinese database, the earliest meaning of *shàng* was 'high', which corresponds to the senses of 'vertically higher' and 'vertically attained'. This makes these two meanings meet the first criterion of PP.<sup>72</sup>

As for the second criterion of predominance in the semantic network, 'vertically attained' fits best. As I mentioned in 6.1, Mandarin *shàng* occurs in a variety of constructions. A look into the corpus reveals that, among those constructions that contain *shàng*, [NP] – [SHANG] is the most frequent, and its usages are predominantly instantiations of 'vertically attained'. Therefore, 'vertically attained' best fits this criterion in terms of frequency in the entire semantic network of *shàng*.

'Vertically attained' also satisfies both the third criterion (naturalness of prediction) and the fourth (facilitation of cognitive processing). 'Vertically attained'

<sup>72</sup> *Sōu cí xún zì* is an online Chinese dictionary that offers information on the diachronic development of most Chinese characters. It can be accessed at http://words.sinica.edu.tw/sou/sou.html.

satisfies both these criteria because the image-schematic components of UPWARD MOTION and CONTACT are imminent not only in the other core senses but also in many other metaphorical usages. Therefore, selection of this sense as the primary sense is the most natural and the most cognitively plausible, which allows it to meet the third and the fourth criteria.

As for the fifth criterion, human phenomenological experience, since the three meanings instantiated in the domain of SPACE ('vertically attained', 'vertically higher', and 'forward') are what human beings are most aware of, these meanings meet this criterion. For the meaning of 'attached', in addition to the conceptual content of an entity being in contact with a surface, the meaning is also aspectual in nature, so does not merely involve the domain of SPACE. Therefore, this sense can hardly be considered the most fundamental. As a result, only the first three senses are all judged to meet the fifth criterion.

With the above results, Table 4 below summarizes how each of the six core senses fits the criteria of PP, where a double circle stands for full satisfaction of a criterion and a single circle for only partial fulfillment. 'Vertically attained' satisfies all the criteria and should be considered the best choice of the sanctioning sense.<sup>73</sup>

		'Vertically attained'	'Vertically higher'	'Forward'	'Attached'	'Completive' and 'inceptive'
	1	0	0			
	2	0				
Criterio	3	0				
	4	0				
	5	0	0	0		

Table 4: The core senses of shàng with respect to Evans' (2004) criteria

The polysemy of *shàng* has been studied by Su (1997) and Jin (2007). Su's (1997) presentation of 'UP' as the prototypical meaning in the semantic extension of *shang* is in line with my analysis. On the other hand, Jin's (2007) choice of 'on' as the prototypical sense is dubious, since the choice was not methodologically justified.

# 6.3 The core senses of *shàng* and their associated constructional schemas

In this section, I discuss the constructional schemas associated with six senses of *shàng*, to see how each of them exhibits its own pattern of grammatical profile and of concept elaboration.

First of all, the concept elaboration of *shàng* is influenced by its preceding verb and its following NP, with the former taking priority in the analysis. Based on the A-D alignment within the assembly, *shàng* is the dependent predication, and the verb is the autonomous predication in a relative sense. This is because, out of many possible concepts associated with a verb, the resultant state of the verbal process is only one of them, while for a resultative suffix, the processual predication is the only concept associated with it; and a suffix needs a verb to specify what kind of process it modifies. The NP that follows comes into play as an argument of the verb, with [V] – [SHANG] being the dependent predication and the NP the autonomous one. Hence, in analyzing the contextual factors which may help determine the meaning of *shàng*, the verb should be given priority over the NP following *shàng*. This principle will hold throughout my discussion of the concept elaboration of *shàng*. Interested readers are referred to Lu (2015a) for a detailed discussion of how the A-D alignment influences the semantics of *shàng*.

#### 6.3.1 'Vertically attained' and its associated constructional schemas

Shàng 'vertically attained' necessarily occurs in the schema of [NP1] - [V] - [SHANG] - [NP2], where the meaning is contingent on its autonomous predication, viz. verbs of vertical elevation that profile an upward trajectory, such as  $p\acute{a}$  'climb,' yuè 'jump,' or dēng 'mount'. Note especially that the notion of EFFORT is involved in most processes of 'vertically attained'. In addition to the above special property of the processual predication, the NP2 slot is always instantiated by a specific GOAL with a surface on top. Examples (6–1) and (6–2), repeated here as (6–19) and (6–20) below, illustrate the two features discussed above.

#### 6 The Core Senses of Shàng

(6-19)	擔心	這場雪		太	大,	屋頂
	dānxīn	zhè-chăng	g-xuě	tài	dà	wūdĭng
	worry	this-CL-si	now	too	big	roof
	吃不住,		待會	我	爬上	屋頂
	chī-bú-zhù		dàihuì	wŏ	pá-shàng	wūdĭng
	contain-NI	EG-PFV	later	Ι	climb-SHANG	roof
	去	鏟一鏟		雪。		
	qù	chăn-yì-ch	hăn	xuě		
	go	shovel-TN	NTV-RED	snow		

"(I) worry that the snow is too heavy for the roof to take. Later, I'll climb onto the roof to shovel the snow."

(6-20)	完工 <i>wángōng</i> finish	的 de LK	時候, <i>shíhòu</i> when	他 <i>tā</i> he	登上 <i>dēng-shàng</i> mount-SHAI	NG
	城牆, <i>chéng qiáng</i> city wall	從 <i>cóng</i> from	東門 <i>dōng mén</i> East gate	到 <i>dào</i> to	北門, <i>běi mén</i> North gate	巡視了 <i>xúnshì-le</i> patrol-PFV
	一周。 <i>yì zhōu</i> one circle					

"When (the construction work was) finished, he climbed onto the top of the city wall, and patrolled from the East Gate to the North Gate to examine (the construction)."

These two examples exemplify a distinct pattern of grammatical profile and concept elaboration for 'vertically attained'. In (6-19), the tr,  $w\delta$  'I', follows a trajectory in SPACE with effort by means of climbing, which is linguistically elaborated by the verb  $p\dot{a}$ , and finally vertically attains the specific and concrete GOAL, which is coded by  $w\bar{u}d\bar{i}ng$  'roof'. Here, the NP  $w\bar{u}d\bar{i}ng$  is a SURFACE which supports the tr and allows the tr to stay firmly on it. The tr in (6-20),  $t\bar{a}$  'he', likewise ascends in SPACE with effort by means of mounting, coded by the verb  $d\bar{e}ng$ , and as a result finishes on the top of the city wall. The GOAL, *chéng qiáng*, is conceptually associated with a SURFACE on top of it, which can physically uphold the tr.

Based on the above discussion, in this usage cluster, *shàng* is structurally preceded by a verb and is followed by an NP 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



Figure 6.2: The image-schematic structure for 'vertically attained'

PATH and an NP associated with SURFACE as the GOAL of the trajectory. With the conceptual base of the SOURCE-PATH-GOAL schema, Figure 6.2 below demonstrates the image-schematic structure for 'vertically attained', where the PATH and the GOAL are both profiled and put in bold, and the horizontal bold line signals the SURFACE-related nature of the GOAL.

Besides satisfying the Meaning Criterion, 'vertically attained' also exhibits its own pattern of grammatical profile and concept elaboration, which entitles this usage cluster to the status of a distinct sense.

## 6.3.2 'Vertically higher' and its associated constructional schema

The sense of 'vertically higher' occurs within the constructional schema of [NP1] – [V] – [SHANG] – [NP2]. The concept elaboration of that schema is first of all dependent on a verb of vertical elevation that profiles only the upward PATH or the manner of vertical elevation. A typical example of the former (upward PATH only) group is *shēng-shàng* 'rise-SHANG', and two instances of the latter (manner of vertical elevation) group being *fú-shàng* 'float-SHANG' and *fēi-shàng* 'fly-SHANG'.<sup>74</sup>

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 general location like *tiān* or *tiānkōng* 'sky', toward which the tr, which is 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 like a tree branch, as in *fēi-shàng zhītóu* 'fly-SHANG tree branch',

<sup>&</sup>lt;sup>74</sup> In addition to [V] – [SHANG], this sense is also instantiated in other constructional schemas, such as [SHANG] – [V]. Typical examples are *shàng-shēng* 'SHANG-rise'and *shàng-fú* 'SHANG-float'.
Figure 6.3: The image-schematic structure for shang meaning 'vertically higher'

then the usage develops an additional meaning and should be analyzed as an instantiation of 'vertically attained'.  $^{75}$ 

From the above discussion, we see that 'vertically higher' has the grammatical profile of [NP1] – [V] – [SHANG] – [NP2]. As for its concept elaboration, the usage involves a verb of vertical elevation that profiles only the upward PATH of the trajectory and a general locative noun phrase as the GOAL, which renders the entire construction strictly instantiated in the domain of SPACE.

Therefore, this cluster of usage satisfies the Grammatical Criterion and the Concept Elaboration Criterion, in addition to the Meaning Criterion, which secures its status as a distinct sense. Figure 6.3 shows the image-schematic structure for 'vertically higher'. With the SOURCE-PATH-GOAL schema as its conceptual base, this cluster profiles both the PATH and the general GOAL, which are both represented in bold, with the SOURCE remaining in the conceptual base.

## 6.3.3 'Forward' and its associated constructional schemas

The meaning of 'forward' occurs in the constructional schema of [NP] - [V] - [SHANG] (- [X]), with X being an optional PATH-highlighting element that can be instantiated by either an adverb or an NP. In addition, its pattern of concept elaboration involves at least the following elements: a verb that prompts a non-vertical PATH of a moving figure; a verb of motion or a verb of transfer; and an onstage point of view, the direction of which coincides with that of the moving figure. Below, I discuss the role played by verbs of motion.

The two instances of  $f\bar{e}ishang$  discussed here, according to Lakoff's (1987) fine-grained image-schematic analysis, would also have to be listed as two separate usages. However, the reason I classify these two instances into different semantic categories is based on their different "conceptual archetypes" (Langacker 1999, 2006, 2008), which I will elaborate on in Chapter 7. Interested readers are also referred to Lu (2017) for details.

In this semantic category, the meaning of *shàng* is contingent on its autonomous predication, in this case verbs of non-vertical motion, such as *zhuī* 'chase' or *găn* 'hurry', which code the motion of the tr and thus highlight the PATH. The above characteristic renders this usage cluster strictly instantiated in the domain of SPACE. However, these verbs are not inherently associated with vertical elevation, and the forward trajectory is coupled with the concept of UP via an onstage conceptualizer that coincides with the tr, as I explained in 6.1. Instances (6–6) and (6–7), repeated here as (6–21) and (6–22), are typical:

(6-21)	) 幹員 發覺		郭長榮	準備	逃逸,
	gànyuán	fājué	guō chángróng	zhŭnbèi	táoyì
	agent	find	Guo Changrong	ready	escape
	立即	擁上,	逮捕	郭	嫌。
	lìjí	yŏng-shàng	dàibŭ	guō	xián
	immediate	swarm-SHA	NG arrest	Guo	suspect

"(When) the agent(s) found that Guo Changrong was about to escape, (they) immediately swarmed to arrest the suspect, Mr. Guo."

(6-22)	浪花	沖來	時,	我	拔腿就跑,
	lànghuā	chōng-lái	shí	wŏ	bátuĭ jiù păo
	wavelet	wash-come	when	Ι	fleed immediately
	浪花	退走	時,	我	也
	lànghuā	tuì-zŏu	shí	wŏ	уĕ
	wavelet	back-away	when	Ι	also
	跟著,		追上去		
	gēn-zhe		zhuī-shà	ng-qù	
	follow-IPFV		chase-SHANG-go		

"When wavelets came toward me, I fled immediately, and when wavelets went away, I followed and chased them..."

For the above two examples, the PATH and the onstage vantage point, which coincides with the tr, are both in profile. In (6–21), the tr's, ganyuan 'agent(s)', travel along a path in the conceptual domain of SPACE, which is coded by the verb  $y\delta ng$ 'to rush (in a collective fashion) toward'.<sup>76</sup> The verb itself does not prompt a vertical path; 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 of, or more specifically in front of, the tr.

<sup>76</sup> The primary figures in this instance, *gànyuán* 'agent(s)', are several conjoined entities that participate in the same process, corresponding to what Langacker (1991: 479) terms "replicate trajectors".

Therefore, for this particular instance, the PATH and the onstage conceptualizer are both conceptually prominent. By the same token, in (6–22), the verb is not associated with the vertical dimension, with the PATH of the tr's motion elaborated by the verb  $zhu\bar{i}$  'chase'. The forward-headed PATH is coupled with UP only with respect to the point of view taken by a conceptualizer that coincides also with the moving figure. This point of view is implicitly prompted by the use of *shàng* and of the deitic term  $q\dot{u}$  'go', so is in profile as well as the PATH. Moreover, note that the verb does not have to be a typical verb of motion but can be a verb that is only peripherally related to the concept of MOTION. Excerpt (6–23) is such an example:

(6-23)	桑斯兒	不甘示弱,		搶上	幾	步,
	<i>sāng sīér</i> Sang Sier	<i>bùgānshìrud</i> not to be o	ut done	<i>qiăng-shàng</i> rush-SHANG	<i>jĭ</i> several	<i>bù</i> step
	和 <i>hàn</i> with	他 <i>tā</i> him	並肩而行 <i>bìngjiāné</i> walk side	f. erxíng e by side		

"Sang Sier refused to be outdone, (so) rushed several steps forward to catch up with him."

For this particular instance, the prototypical meaning of the verb  $qi\check{a}ng$  is 'rob,' and so it is not a typical verb of motion, but the verb can extend to describe a 'hurried' motion. It is therefore peripherally related to MOTION, which renders the whole construction an instantiation in SPACE. In this instance, both the PATH and the onstage point of view are conceptually prominent. Here, an NP immediately following *shàng*, *jĭ bù* 'several steps', linguistically elaborates the length of the trajectory and hence profiles the PATH. The onstage vantage point is also in profile, from which the trajectory looks upward.

Following from this, we can generalize that the first possible source of concept elaboration for 'forward' is a verb of motion, or a verb that is peripherally related to MOTION, and that these verbs do not invoke a strict sense of verticality.

In addition to verbs of motion, the second group of verbs that collocate with 'forward' are verbs of transfer, as in *sòng-shàng* 'give-SHANG', *xiàn-shàng* 'present-SHANG', *duān-shàng* 'carry-SHANG', etc. Instances (6–24) and (6–25) illustrate this group of usages:

(6-24)	她	顯然	舒服	多	了	我
	tā	xiănrán	shūfú	duō	le	wŏ
	she	obviously	comfortable	much	CRS	Ι
	又	倒了	杯	水,	送上	藥
	yòu	dăo-le	bēi	shuĭ	sòng-shàng	yào
	again	pour-PFV	cup	water	give-SHANG	medicine

"She obviously felt better... I poured another cup of water and gave (her) the medicine."

(6-25)	出	鬬	當地	美女	即	上前,
	chū	guān	dāngdì	měinů	jí	shàng-qián
	exit	gate	local	beauty	PRT	come up
	獻上	一朵		火鶴花	給	女士們。
	xiàn-shàng	yì-duŏ		huŏhèhuā	gěi	nůshì-men
	present-SHANG	one-CL		anthurium	to	lady-PL

"(When we) exited the gate, local beauties immediately came up (to us) and presented an anthurium to (each of our) ladies."

As can be seen in (6–24) and (6–25), the verbs of transfer, which are essentially verbs of caused motion, also serve to profile a non-vertical PATH, with *shàng* likewise prompting an onstage vantage point that coincides with the tr. In (6–24), the figure which is caused to move and which follows a non-vertical PATH during the process is *yào* 'medicine', with the processual predication of transfer coded as *sòng* 'give', profiling the PATH. The trajectory of *yào* is coded as upward, since the goal is in the Interactive Focus of an onstage conceptualizer identified with the source of the trajectory. By the same token, the tr in (6–25), *yì-duŏ huŏhèhuā* 'one-CL anthurium', is directed to *nǚshì-men* 'ladies' by means of *xiàn* 'present'. The function of *shàng* in this instance is similarly to prompt an implicit onstage vantage point that coincides with the tr, via the perceptually prominent region of which the direction of the trajectory is associated with UP. With the above illustrations, we can see that verbs of transfer that prompt a nonvertical PATH are another source of concept elaboration for 'forward'. An onstage vantage point is similarly conceptually prominent in this sub-cluster.

A comparison between 'vertically higher' and 'forward' reveals that the GOAL for 'vertically higher' is always elaborated by a locative NP immediately following *shàng*, which is not the case for 'forward'. 'Forward' need not involve an NP immediately following *shàng*, and even if there is an NP present, it does not instantiate the GOAL of the trajectory. Specifically, the NP can be instantiated by the length of the PATH, as in *qiǎng-shàng jǐ bù* 'rush-SHANG several steps', or by the object transferred in the case of a verb of transfer, as in *sòng-shàng yào* 'pres-

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Figure 6.4: The image-schematic representation for 'forward'

ent-SHANG medicine'. Therefore, the GOAL is not necessarily encoded in the constructional schema for *shàng* 'forward'. As a result, the GOAL is not conceptually prominent and remains only latent in the conceptual base.

Figure 6.4 below shows the imagistic structure for 'forward.' The profiled PATH is in bold, with the onstage vantage point coinciding with the tr, which is also salient. However, the direction of the trajectory can be construed as upward only from that particular viewpoint, so it is represented in a dashed line, which stands for a loss of vertical sense.

In this section, I have shown the distinct pattern of grammatical profile and of concept elaboration for 'forward', which includes a verb of motion or a verb of transfer that prompts a non-vertical PATH and an onstage conceptualizer that coincides with the tr. Accordingly, 'forward' satisfies the Grammatical Criterion and the Concept Elaboration Criterion, and can be assigned the status of a distinct sense.

#### 6.3.4 'Attached' and its associated constructional schemas

'Attached' is another core sense of *shàng* identified in the corpus. In 6.1.4, I addressed the emphasis on physical contact with a SURFACE as its additional meaning not present in the other senses. As has been shown in 6.1.4, 'attached' focuses on the resultant state of its autonomous predication, with a tr in contact with a typical SURFACE as the lm. Now, I will discuss this meaning with respect to the Concept Elaboration Criterion and the Grammatical Criterion of PP.

If we compare this sense with 'vertically attained', two observations can be made as to its pattern of concept elaboration. Firstly, verbs that are associated with 'attached' are free of a sense of verticality and come in a variety of categories, including verbs of wearing and verbs of applying substance to a surface, which all prompt the concept of SURFACE.<sup>77</sup> Secondly, the thematic role of the NPs immediately following *shàng* is also different from that which we saw in the previous senses— for 'attached', the NPs are instantiated by a thematic patient instead of by a location.<sup>78</sup> Below, I present these groups of verbs and the NPs.

The first group of verbs found to collocate with 'attached' is verbs of wearing, including *chuān* 'wear (clothes)', and *dài* 'wear (accessories)'. Such verbs are processual predications where a primary figure, via caused motion, gets close to, and is finally attached to, a body part that can be construed as a kind of surFACE. Excerpt (6–10), repeated here as (6–26) for ease of reference, and (6–27) below both instantiate the meaning of 'attached':

(6-26)	看著	兒子	哀求	的	眼神,		
	kàn-zhe	érzi	āiqiú	de	yănshén	1	
	look-IPFV	son	beseech	LK	look		
	葉三娘		低了頭		取下		
	yè sānniáng		dī-le-tóu		qŭ-xià		
	Ye Sanniang		lower-PFV-head		take-do	take-down	
	已經	戴上		頭頂	的	斗笠	
	yĭjīng	dài-shàng	3	tóudĭng	de	dŏulì	
	already	wear-SH	ANG	head	LK	leaf hat	

"As she saw the beseeching look in her son's eyes, Ye Sanniang lowered her head and took down the leaf hat that she had been wearing on her head..."

(6-27)	大家	紛紛	穿上	外套,	好像
	dàjiā	fēnfēn	chuān-shàng	wàitào	hǎoxiàng
	every one	in droves	wear-SHANG	jacket	like
	回到	冬天	一樣。		
	huí-dào	dōngtiān	yíyàng		
	return-PFV	winter	same		

"Everyone put on their jacket in droves, and now it was like winter again."

This category of verbs invoke the concept of SURFACE. In (6–26), the tr is  $d\delta uli$  'leaf hat', and it follows a trajectory in SPACE in the verbal process of dai 'wear (accessories)'. As a result of that process, the leaf hat finally rests on a SURFACE, which is instantiated by the top of Ye Sanniang's head. Likewise, in (6–27), shàng

The variety of verbs listed here is not meant to be exhaustive. We could expect to encounter a wider variety of [V] – [SHANG] with a larger corpus.

In the corpus, I found an interaction between the usage cluster of 'attached' and the *bǎ* construction, which I believe is due to the nature of NP2 being patient-like.

highlights the resultant state of a moving figure, coded as *wàitào* 'jacket', being in contact with the agent's body, which can be construed as a SURFACE.

In addition to the category of the autonomous predication relative to *shàng*, the NP is instantiated by a thematic patient instead of by a location. Specifically,  $d\delta uli$  is the thematic patient of  $d\dot{a}i$  in (6–26) and *wàitào* that of *chuān* in (6–27).

In addition to verbs of wearing, the second typical group of verbs associated with 'attached' are verbs of applying substance to a surface. Such verbs include, but are not limited to:  $t\hat{u}$ -shàng 'apply-SHANG';  $shu\bar{a}$ -shàng 'brush-SHANG'; and  $p\bar{e}n$ -shàng 'spray-SHANG'. For this category of verbs, the NPs following shàng are similarly thematic patients. In addition to excerpt (6–8), repeated here as (6–28), (6–29) is also typical of this sub-group of instantiations of 'attached':

(6-28)	房屋	外,	都	刷上	不同
	<i>fángwū</i>	<i>wài</i>	<i>dōu</i>	<i>shuā-shàng</i>	<i>bù tóng</i>
	house	outside	all	brush-SHANG	different
	的	顏色,	看起來	有點	像
	de	<i>yánsè</i>	<i>kàn-qĭlái</i>	<i>yǒudiǎn</i>	<i>xiàng</i>
	LK	color	look-IPFV	a little	LK
	童話 <i>tónghuà</i> fairy tale	世界。 <i>shìjiè</i> world			

"Outside of (the) houses is/was painted with different colors, (which) look like a fairy-tale world."

(6-29)	社會科學院,			管理學院,			夜間部,	
	Faculty of Social Studies		Faculty	of Manage	ement	Evening Division		
	及	農學院	<b>売</b> ,		所有	教室	的	
	jí	jí nóng xuéyuàn and Faculty of Agric			suŏyŏu	jiàoshì	de	
	and			culture	all	classroom	LK	
	外牆,		被	噴上		藍色	油漆。	
	<i>wài qiáng</i> external wa	all	bèi PASS	<i>pēn-shài</i> spray-Sl	ng HANG	<i>lánsè</i> blue	<i>yóuqī</i> paint	

"At Faculty of Social Sciences, Faculty of Management, Evening Division, and Faculty of Agriculture, the external walls of all classrooms were sprayed with blue paint."

For this group of instantiations of [V] – [SHANG], my observation regarding the verb and the thematic role of the NP still holds true. Conceptually dependent

on verbs of applying substance to a surface, shàng brings to focus the resultant state of the verbal process, with the tr being attached to a lm that invokes a kind of surface. In (6–28), the autonomous predication of  $shu\bar{a}$  'brush' in  $shu\bar{a}$ -shànginvolves 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 onto the surface, i.e. the external walls of the houses. Similarly in (6–29), the thematic patient, *lánsè yóuqī* 'blue paint', is applied to a surface in the autonomous predication of *pēn* 'spray' in *pēn-shàng*, with the surface linguistically coded as *jiàoshì de wài qiáng* 'the external walls of the classrooms'. Here, the blue paint can be construed to be "attached" to the walls of the classrooms. Note also that in the above examples, *yánsè* 'color' in (6–28) and *yóuqī* in (6–29) are both the thematic patient, which is acted upon and undergoes change by an agentive figure.

In addition to typical verbs of applying substance such as *shuā* and  $p\bar{e}n$ , some other verbs that involve the notion of written creation can also be put in this category, since a process of written creation can alternatively be construed as applying ink or paint onto a piece of paper. These verbs include *xiě* 'write' and *huà* 'draw', with Excerpts (6–30) and (6–14), repeated here as (6–31) for ease of reference, being typical examples.

(6-30)	在	牆上	畫上	大		如	牛
	zài	qiáng-shàng	huà-shàng	g dà		rú	niú
	LOC	wall-LOC	draw-SH	ANG big	ç.	like	buffalo
	的	肥豬	和	幾個人		才	能
	de	féizhū	hàn	jĭ-ge-rén		cái	néng
	LK	fat pig	and	several-C	L-man	PRT	can
	抬得動		的	白	菜。		
	tái-dé-dòi	ng	de	bái	icài		
	raise-PFV	/-move	LK	cał	obage		

"(They) drew on the wall fat pigs that were as big as buffalos and cabbages that took several people to carry."

(6-31)	我	就	用	一張	紙,	寫上
	wŏ	jiù	yòng	yì-zhāng	zhĭ	xiě-shàng
	Ι	PRT	use	one-CL	paper	write-SHANG
	「媽媽	過	節	快樂」	六個	字。
	māma	guò	jié	kuàilè	liù-ge	zì
	mother	pass	holiday	happy	six-CL	character

"I then used a sheet of paper and wrote on it six characters: Happy Holiday, Mom!"

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It is clear from the above instances that the concept of SURFACE is also involved in these verbal processes, and that the NPs immediately following *shàng* are also being acted upon and undergoing change. In (6-30), the autonomous predication of *huà* 'draw' in *huà-shàng* prompts a SURFACE on which the ink and the created symbol is attached, and this SURFACE is instantiated by *qiáng* 'wall'. The symbol created by means of drawing, *dà rú niú de féizhū*, is acted upon by the painter. Similarly, in (6-31), the autonomous predication of *xiě* 'write' in *xiě-shàng* also clearly involves a SURFACE on which the ink or the written characters is attached. The NP immediately following *shàng*, the six characters, is likewise a thematic patient instead of a location.<sup>79</sup>

The above illustrations show the sources of concept elaboration for 'attached'. This cluster is first and foremost conceptually dependent on a verb that prompts a sURFACE as its autonomous predication. In addition, the SURFACE is instantiated by an NP following *shàng*, which is a thematic patient. In particular, the above verbs fall into two major categories: verbs of wearing, and verbs of applying substance to a surface.

In addition to its own pattern of concept elaboration, the usage cluster of 'attached' exhibits a distinct grammatical profile. Specifically, shang 'attached' almost always occurs in the construction of [NP1] - [V] - [SHANG] - [NP2], and if shàng was omitted, the resultant [NP1] – [V] – [NP2] would still be acceptable, given appropriate contexts, with the only difference being the way the conceptual content prompted by the symbolic assemblies was construed. In comparison, the constructional schema of [NP1] – [V] – [NP2] merely reports the conceptual content of NP1 taking the action coded by V to NP2, while the schema of [NP1] - [V] - [SHANG] - [NP2] further brings to focus the resultant state. For instance, for a verb of applying substance to a surface, *pēn yóuqī* 'spray paint' and *pēn-shàng* yóuqī 'spray-SHANG paint' are both grammatical, but the latter accentuates the reading of paint being sprayed onto a surface. On the other hand, the above observation does not hold for the instantiations of the [NP1] - [V] - [SHANG] - [NP2] schema for 'vertically attained,' 'vertically higher,' and 'forward.' For example, shàng cannot be omitted in fēi-shàng tiānkong 'fly-SHANG sky,' qiǎngshàng jǐ bù 'rush-SHANG several steps,' or pá-shàng wūdǐng 'climb-SHANG roof'. Otherwise, anomaly or a change in conceptual content would result.<sup>80</sup>

An interesting observation that can be made about these verbs that involve the concept of written creation is that this cluster of [V] – [SHANG] is interchangeable with [V] – [XIA] in certain context (Chiarong Lu p.c.). This is an interesting topic for further pursuit but would require a detailed exploration into the usage patterns of *xià* as well. The construction was also mentioned in Lu (2017).

A comparison between these instantiations of the [NP1] - [V] - [SHANG] - [NP2] schema and their abridged counterparts for 'attached' reveals that they both prompt the same conceptual content, with the only difference being how the conceptual content is viewed, which bears a schematic similarity to the clusters of 'completive' and 'inceptive.' However, this particular usage cluster is still different from the two aspectual meanings in the sense that the element of SURFACE is still obvious



**Figure 6.5:** a) The imagistic structure for cases with an ambiguous reading between 'vertically attained' and 'attached'; b) The imagistic structure for 'attached'

The above discussion shows that 'attached' meets the Concept Elaboration Criterion and the Grammatical Criterion, and can be analyzed as a distinct sense.

Following from the discussion in 6.1.4 and in this section, Figure 6.5a shows the transition stage between 'vertically attained' and 'attached', where the dashed line stands for the co-presence of a sense of verticality much less evident than 'vertically attained' and a sense of contact with a surface, while Figure 6.5b represents the imagistic structure for 'attached', with the dotted line showing an almost total loss of the vertical sense. For this usage cluster, the spatial sense is now weaker, since the sense of motion has almost completely faded away, with the conceptual substrate of PATH remaining only in the conceptual base. What is in profile is the remaining conceptual content of the tr being attached to a SURFACE as the GOAL of the trajectory.

## 6.3.5 'Completive' and its associated constructional schemas

In 6.1.4 and 6.1.5, I discussed how 'completive' is an extension from 'attached', with the main difference between the two meanings being whether a prototypical surFACE is involved. In 6.3.4, I mentioned that the usage cluster of *shàng* 'completive' is structurally similar to that of 'attached' in the sense that they both occur in [NP1] – [V] - [SHANG] - [NP2], where *shàng* can be omitted without a major change in the conceptual content. In this section, I further address the above two observations in terms of the Concept Elaboration Criterion and the Grammatical Criterion.

in 'attached', which renders 'attached' semantically more concrete in comparison to the other two meanings and allows us to distinguish it from them in terms of the Meaning Criterion and the Concept Elaboration Criterion. Note also that the similarity shared by 'attached', 'completive' and 'inceptive' attests Langacker's (1990, 1999) observation on subjectification and grammaticalization, which I will come back to in Chapter 7.

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Firstly, 'completive' exhibits a distinct pattern of concept elaboration of its preceding verb invoking the conceptual element of CONTACT. In particular, there are two types of verbs that typically collocate with 'completive' in the corpus, which are verbs of closing and verbs of connection. In particular, the former subgroup can be instantiated by *guān-shàng* 'close-SHANG', *hé-shàng* 'come together-SHANG', *bì-shàng* 'shut-SHANG', etc. Examples (6–12) and (6–13), repeated here as (6–32) and (6–33), are typical instances that involve a verb of closing:

(6-32)	皆	門	快要	關上		或
	dāng	mén	kuài yào	guān-shàng		huò
	when	door	about to	bout to close-SHA		or
	正在	合攏	時,	千萬	別	進出。
	zhèng zài	hélŏng	shí	qiānwàn	bié	jìn-chū
	IPFV	join	when	certainly	NEG	enter-exit

"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."

(6-33)	白兔 <i>báitù</i> rabbit	笑得 <i>xiào-dé</i> laugh-PFV		嘴唇 <i>zuĭchún</i> lip	都 <i>dōu</i> PRT	裂開 <i>liè-kāi</i> split-open
	了, le CRS	一直 <i>yìzhí</i> until	到 <i>dào</i> to	現在 <i>xiànzài</i> now	還 <i>hái</i> still	沒有 méiyǒu NEG
	合上。 <i>hé-shàng</i> come toge	ther-SHAN	G			

"The rabbit kept laughing until its lips split, and its lips have still not come together."

The commonality shared by (6-32) and (6-33) is the element of CONTACT as the resultant state of a verbal process. In comparison to 'attached', this usage cluster does not code a tr attached to a prototypical surface, but merely highlights the final state of two entities being in contact with each other. In (6-32), shàng in mén kuài yào guān-shàng 'door about to close-SHANG' profiles the endpoint of the process of closing coded by the autonomous predication of guān in guān-shàng, with the two doors of an elevator coming into proximity to each other. Likewise, shàng in (6-33) profiles the endpoint of the process of two lips coming together, which is coded by its autonomous predication of hé in hé-shàng. The above two instantiations are different from those of 'attached', in that these instantiations serve only to bring to focus the endpoint of a process where two entities enter

into contact, instead of coding an object 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 an instantiation of 'completive'. Therefore, 'completive' can be viewed as an attenuated version of 'attached' with the conceptual content of SURFACE having faded away, which I will address in Chapter 7.

Verbs of connection are another possible source of concept elaboration for *shàng* 'completive', as in *lián-shàng* 'link-SHANG', *jiē-shàng* 'connect-SHANG', and *chā-shàng* 'plug-SHANG'. Excerpt (6–34) is typical:

(6-34)	印表機 <i>yìnbiǎo-jī</i> printer	<sup>∦∐</sup> hàn and	尤碟機 guāngdié-jī CD-ROM	只安 <i>zhĭyào</i> as long as	插上 <i>chā-shàng</i> plug-SHANG
	線, xiàn	即 jí	可 kě	使用。 shĭyòng	
	cable	PRT	can	use	

"(Nowadays,) printers and CD-ROMs can be used as long as they are plugged in."

For such a verb of connection, the conceptual representation of [NP1] - [V] - [SHANG] - [NP2] is a tr approaching a lm and finally coming into contact with it. As with a verb of closing, the conceptual representation of a verb of connection also bears a schematic similarity to that of 'attached', in that the two usage clusters both involve physical contiguity between two entities, with the only difference being the involvement of a typical surFACE. In (6–34), *shàng* encodes the resultant state of the autonomous predication of *chā* 'plug' in *chā-shàng*, i.e. a printer and a DVD-ROM being wired, with the socket of the printer and the DVD-ROM in spatial proximity to and in contact with one end of the wire. No strictly defined surFACE can be identified in this instance.

With the above illustrations, I have shown how verbs of closing and verbs of connection associate with the meaning of 'completive' in [NP1] – [V] – [SHANG] – [NP2]. Accordingly, Figure 6.6 below represents the imagistic structure for 'completive,' where the dashed horizontal line represents the almost total attenuation of the element of SURFACE. Since the resultant state of an entity in contact with another is at issue, the GOAL of the trajectory is conceptually prominent, with the other portions of PATH and SOURCE staying in the conceptual base.

Although I have identified verbs of closing and verbs of connection as the source of concept elaboration for 'completive', I found some other verbs in the corpus that could also be analyzed as instantiations of 'completive'. In particular, some instantiations of [V] – [SHANG] that contain a verb of motion, if followed by an NP that specifies the goal of the trajectory, may also fall into this semantic



Figure 6.6: The imagistic structure for 'completive'

category. This overlap of categories can be attributed to the experiential basis of an object in motion bearing the potential to result in its contact with another object. *Zhuī-shàng* 'chase-SHANG' and *gǎn-shàng* 'hurry-SHANG' in (6–35) and (6–36) are such potentially ambiguous examples:

(6-35)	太陽! tàiváng	看 kàn	我 wŏ	來 lái	追上 zhuī-shài	ng
	sun	look	Ι	come	chase-SH	HANG
	你, <i>nĭ</i> you "Sun! I an	勝過 <i>shèng-guò</i> win-PFV here to cat	你! <i>nĭ</i> you tch you up	) and to sur	pass you!"	
(6-36)	傑克 <i>jiékè</i> Jack	終於 <i>zhōngyú</i> finally	趕上 <i>gǎn-shàng</i> hurry-SH	巴士 g bāss ANG bus	亡, 將 hì jiāng DSPL	訊息 <i>xùnxí</i> . message
	傳給 <i>chuán-gěi</i> pass-to	司機。 <i>sījī</i> driver				

"Jack finally caught the bus and passed the message to the driver."

In these examples, *shàng* similarly profiles the resultant state of the process encoded by the verb, i.e. an object in motion finally entering into potential contact with another. In (6–35), *shàng* codes the final state of the tr being in proximity to, and possibly in potential contact with, the lm,  $n\check{i}$  'you', as a result of the verbal process *zhuī* 'chase'. *Shàng* in (6–36) likewise codes the result of the processual predication of *găn* 'hurry,' with the tr being contiguous to the lm, *bāshì* 'bus'. In both these examples, *shàng* is associated with a state of contact, which accentuates the endpoint of the autonomous processual predication in [V] – [SHANG].

Remember that in 6.3.3, I presented (6–7) as a typical instantiation of 'forward', which was an instance of [V] – [SHANG] that involves the same motion verb *zhuī* 'chase'. The excerpt is repeated here as (6–37) for ease of reference, as a contrast to (6–35) above:

(6-37)	浪花	沖來	時,	我	拔腿就跑,
	lànghuā	chōng-lái	shí	wŏ	bátuĭ jiù păo
	wavelet	wash-come	when	Ι	fleed immediately
	浪花	退走	時,	我	也
	lànghuā	tuì-zŏu	shí	wŏ	уě
	wavelet	back-away	when	Ι	also
	跟著,		追上去		
	gēn-zhe		zhuī-shàng-q	ıù	
	follow-IPI	FV	chase-SHAN	NG-go	

"When wavelets came toward me, I fled immediately, and when wavelets went away, I followed and chased them..."

Zhuī-shàng in these two examples has very different co-texts, hence its different meanings in use. In (6–37), zhuī-shàng is followed by the PATH-highlighting element of  $q\dot{u}$  'go' that profiles the PATH and as a result underscores the reading of 'forward', which is imagistically PATH-prominent. By contrast, zhuī-shàng in (6–35) is followed by an NP that specifies the GOAL of the trajectory, nĭ, which renders the image-schematic structure of this particular instantiation of [V] – [SHANG] GOAL-prominent and its reading endpoint-salient. Therefore, embedded in different co-texts, each associated with its respective imagistic structure, shàng can develop different meanings in zhuī-shàng. Figure 6.7 below illustrates such ambiguous cases of [V] – [SHANG], the reading of which is dependent on what follows shàng.<sup>81</sup>

In Chapter 5, we discussed how the dependent predication may induce a metonymic extension in the autonomous predication in a symbolic assembly (Croft 1990). Accordingly, the difference between (6–35) and (6–37) can also be accounted for by the fact that in *zhuī-shàng-qù*, the dependent predication of the resultative *shàng-qù* triggers a domain highlighting in the autonomous predication of *zhuī*.



Figure 6.7: Dual interpretations of *shàng* between 'forward' and 'completive' within certain constructional sub-schema

In the above figure, the higher-level schema of [NP] – [V MOTION] – [SHANG] bears the potential of ambiguity between 'forward' and 'completive', which can be exemplified by *zhuī-shàng*. The schema is in turn imminent in its two instantiations, [NP] – [V MOTION] – [SHANG] – [QU] and [NP1] – [V MOTION] – [SHANG] – [NP2 GOAL], which is also an instantiation of 'forward' and 'completive' at the semantic pole respectively.

As for grammatical profiling, 'completive' is similar to 'attached', which was mentioned in 6.3.4. Specifically, in 'completive', *shàng* can also be omitted without inducing a major change in the conceptual content. For instance, for a verb of closing, *guān-shàng mén* 'close-SHANG door' prompts a similar conceptual content to its reduced counterpart, *guān mén* 'close door', with the only difference being how the conceptual content is construed. The same holds true for a verb of connection, instantiated by *chā-shàng xiàn* 'plug-SHANG wire' and its abridged counterpart *chā xiàn* 'plug wire.' And the same also holds true for a verb of motion, instantiated by *gǎn-shàng bāshì* 'hurry-SHANG bus' and the reduced *gǎn bāshì* 'hurry bus'.

With the above discussion, we see that 'completive' meets the Concept Elaboration Criterion and the Grammatical Criterion, in addition to the Meaning Criterion. Therefore, this meaning can be established as a distinct sense.

### 6.3.6 'Inceptive' and its associated constructional schemas

'Inceptive' is the sixth meaning identified in the corpus based on the methodology of PP which also exhibits a distinct pattern of concept elaboration and grammatical profile.

Verbs associated with 'inceptive' are instantiated in the mental domain with a sense of affinity, as in *ài-shàng* 'love-SHANG', *mí-shàng* 'addict-SHANG', *xihuān*- *shàng* 'like-SHANG'. Excerpts (6–16) and (6–17), repeated here as (6–38) and (6–39), are typical:

(6-38)	萬一	他	追上了	別的	女孩,
	<i>wànyī</i>	<i>tā</i>	<i>zhuī-shàng-le</i>	<i>bié de</i>	<i>nǚhái</i>
	what if	he	chase-SHANG-PFV	other	girl
	或者是	我	愛上	你,	那
	<i>huòzhěshì</i>	wǒ	<i>ài-shàng</i>	nĭ	<i>nà</i>
	or	I	love-SHANG	you	then
	怎麼辦? <i>zěnmebàn</i> what to do	)			

"What if he met another girl, or if I fell in love with you, then what shall (we) do?"

(6-39)	對	佛法	有了	更	進一步	的
	duì	fófă	yŏu-le	gēng	jìnyíbù	de
	about	Buddhism	have-PFV	more	further	LK
	認識,	她	才	瞭解	其中	意涵
	rènshì	tā	cái	liăojiě	qízhōng	yìhán
	understan	ding she	PRT	know	within	meaning
	並	逐漸	迷上		佛學。	
	bìng	zhújiàn	mí-shàng		fó-xué	
	and	gradually	addict-SHAN	NG	Buddhist-s	tudy

"After she had more thorough knowledge of Buddhism, she came to understand its real meaning, and was getting more and more addicted to the study of Buddhism."

In these two examples, *shàng* profiles the inception of a state of being emotionally attracted, which is in turn linguistically elaborated by its autonomous predication in the assembly of [V] – [SHANG], with the resultant state remaining after the inception. An example of this is (38), in which *shàng* highlights the beginning of the state of the tr being emotionally attached, which is elaborated by the verb *ài* 'love'. After the inception of that particular state, the state of being in love lasts. Similarly, *shàng* in (6-39) underscores the inception of the state of someone being attracted to the study of Buddhism, which is elaborated by the verb *mi* 'addict'. The state of being addicted, which can be understood as a kind of potential mental closeness, also remains after its inception.

Note especially that the verbs prompt the notion of mental contiguity between two entities in an abstract sense. Specifically, the autonomous predications relative to *shàng*, i.e. *ài* and *mí*, 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 *hèn* 'hate' or *tǎoyàn* 'dislike', would create an anomaly if combined with *shàng*. With the above contrast, psychological closeness characterizes the usage cluster of *shàng* 'inceptive'. This abstract contiguity is an attenuated version of 'completive', with the element of spatial proximity having faded away, leaving behind only a vestige that is highly schematic, so that it can only be instantiated in an abstract domain. I will come back to this observation in Chapter 7.<sup>82</sup>

Having noted the pattern of concept elaboration of 'inceptive', we are faced with this question: As I discussed in 6.1, the emergence of the inceptive reading can be attributed to a shift in the windowing of attention. But how does this shift in perspective take place at the conceptual level?

I argue that such conceptual transformation is forced by the possible connection between the notion of CONTACT and a homogenous state, and that the shift is experientially motivated. Remember that the notion of CONTACT is the essential element in the concept elaboration of 'completive', and that the concept elaboration of *shàng* 'inceptive' is dependent on the stative and homogenous nature of the autonomous predication relative to it. I claim that the connection between CONTACT and a homogeneous state is experientially based, in the sense that a homogenous state can result when an object initiates contact with another and remains in contact with it. This is a recurrent pattern that emerges from our daily interaction with the world.<sup>83</sup>

This argument allows us to formulate the image-schematic structure for *shàng* meaning 'inceptive' as shown in Figure 6.8 below. In Figure 6.8, the endpoint of the mental process of entering into emotional closeness is clearly in profile, with its SOURCE and PATH not receiving much attention and remaining in the conceptual base. The horizontal line stands for the concept of CONTACT, with the dashed line representing the remaining vestige instantiated in the mental domain after

<sup>82</sup> Interested readers are referred to Lu and Su (2012) for a detailed discussion on this matter.

This explanation attributes the semantic shift from 'completive' to 'inceptive' not to a metaphorical but to a metonymic extension, since the conceptual transformation boils down to a shift in profile within one experiential gestalt. The other point against a metaphorical account is the lexical aspectual nature of the autonomous predication relative to *shàng* meaning 'completive' and 'inceptive'. The autonomous predications in the usages of 'completive' involve incremental change, as in an event of closing or an event of chasing, whereas those for 'inceptive' are homogenous and do not involve any change at all. Therefore, the above event structures do not make good cross-domain counterparts, even though the two clusters are instantiated in distinct conceptual domains and are seemingly metaphorical in relation. Interested readers are referred to Lu (2017) for a similar argument against metaphor as the driving force of semantic change in *shàng*. Readers are also referred to Langacker's (1999) discussion on the English *be going to* construction, where it was convincingly shown how a seemly abrupt cross-domain semantic transfer is in essence gradual.



Figure 6.8: The imagistic structure of shàng meaning 'inceptive'

the element of physical contiguity has faded away (hence a more broken line than that of 'completive' in Figure 6.7).<sup>84</sup>

## 6.4 Summary of the chapter

In this chapter, I scrutinized the non-metaphorical core senses of *shàng* in [V] – [SHANG], which is structurally similar to [V] – [UP] in English. I discussed the prototypical sense of 'vertically attained', with the notion of surFACE that characterizes it. 'Vertically higher' extends from the prototypical meaning, and the sense of 'forward' is further extended via the cognitive mechanism of self-projection. Along the other track of semantic extension, the conceptual substrate of surFACE is gradually attenuated, leaving behind the other senses: 'attached'; 'completive'; and 'inceptive'. Figure 6.9 summarizes the organization of the core senses of *shàng*.

Beyond the semantic network, an examination of the core senses of shàng with respect to grammatical profile and concept elaboration echoes what was shown to be true for up in Chapter 4. Specifically, as I showed in my discussion on 'vertically attained', 'attached', 'completive', and 'inceptive', use of authentic data and distinguishing between minor clusters of usages allows us to identify the possible "bridging context" (Heine 2002) that fosters semantic extension from one sense to another. In addition, as I showed in my discussion on 'forward', 'attached', and 'completive', a sense is not a homogeneous lump but instead should be

Note that there are other instantiations of [V] - [SHANG] - [NP] where the NP following *shàng* is instantiated in the domain of TIME, with typical examples including *huā-shàng shuāng-bèi shí-jiān* 'spend-SHANG double-multiplication time' and *zõu-shàng yì-zhěng-tiān* 'walk-SHANG one-whole-day'. I believe such a temporal reading of these usages is triggered by the temporal nature of the NP, and so is metaphorical in essence and therefore beyond the scope of the current chapter. Interested readers are referred to Lu (2015) for a detailed discussion of such metaphorical senses.

understood as a composite of different sub-groups of usages in the form of constructional schemas. My practice of fleshing out constructional schemas in terms of grammatical profile and concept elaboration has thus allowed for a constructionist characterization of what constitutes a semantic category. Table 5 below summarizes what constructionally defines each core sense of *shàng* in terms of its grammatical behavior and its pattern of concept elaboration:

Sense	Grammatical Profile	Concept Elaboration
'Vertically attained'	[NP1] - [V] - [SHANG] - [NP2]	<ol> <li>PATH- and GOAL-prominent</li> <li>V VERTICAL MOTION in SPACE that involves EFFORT</li> <li>NP2 prompting SURFACE</li> </ol>
'Vertically higher'	[NP1] - [V] - [SHANG] - [NP2]	<ol> <li>PATH- and GOAL-prominent</li> <li>V VERTICAL MOTION in SPACE</li> <li>NP2 as a locative NP and of general nature</li> </ol>
'Forward'	[NP] – [V] – [SHANG] (–[X])	<ol> <li>SOURCE- and GOAL-prominent</li> <li>V NON-VERTICAL MOTION in SPACE</li> <li>For a V MOTION, X as a PATH-highlighting element after <i>shàng</i>, which can be instantiated by an ADV or an NP</li> <li>For a V TRANSFER, X as the direct object</li> <li>Invoking an onstage conceptualizer</li> </ol>
'Attached'	[NP1] - [V] - [SHANG] - [NP2], with <i>shàng</i> being optional	<ol> <li>GOAL-prominent</li> <li>V WEARING and V APPLYING SUBSTANCE TO A SURFACE</li> <li>Either NP1 or NP2 prompting SURFACE</li> </ol>
'Completive'	[NP1] - [V] - [SHANG] - [NP2], with <i>shàng</i> being optional	1. GOAL-prominent 2. V CLOSING, V CONNECTION and V MOTION causing (potential) CONTACT
'Inceptive'	[NP1] - [V] - [SHANG] - [NP2], with <i>shàng</i> being optional	<ol> <li>GOAL-prominent</li> <li>V MENTAL STATE with a sense of affinity</li> </ol>

**Table 5:** Distinct patterns of grammatical profiling and concept elaboration

 for the core senses of shàng in [V] – [SHANG]

The summary in Table 5 supports two fundamental assumptions in CG: that language use is grounded in basic human cognitive ability; and that there exists a close relationship between perception and conception. In particular, there are three major points in Table 5 that help justify the above assumptions. Firstly, we see that the concept elaboration of a lexical sense in a symbolic assembly is close-ly associated with the image-schematic structure prompted by the constructional schema, which illustrates the close relation between meaning and perception. Specifically, in all these constructional schemas of [V] – [SHANG], *shàng* serves



Figure 6.9: The The organization of the core senses of shàng

to prompt a conceptual base, part of which is highlighted and receives more attention than the rest. This windowing of attention is accomplished by the interaction between *shàng* and its co-text. The second piece of evidence is the involvement of a vantage point in 'forward'. Perspective-taking is a basic perceptual ability of humans. An onstage point of view, which may alternate with the default offstage one, can equip the conceptualizer with conceptual flexibility, which allows for extension at the semantic pole of a symbol. Thirdly, focal adjustment is a key operating principle in human perception and conception. This is attested by the semantic extension from 'completive' to 'inceptive', which involves different allocations of attention to the subparts of the same conceptual scene, giving rise to different construals of an identical conceptual content.

The discussion in the current chapter has provided a basis for a contrast between up and its Mandarin counterpart, *shàng*. In the next chapter, I will further advance the theme of the present study, the connection between perception and conception, by discussing the relationship between meaning and viewing arrangement in conceptualization (Langacker 1985, 1990, 1999).

## 7 SUBJECTIFICATION, ATTENUATION AND CONCEPTUAL ARCHETYPES

In this chapter, I will apply the findings described in Chapters 4 through 6, and compare [V] – [UP] and [V] – [SHANG] using the CG framework to explore how the positive pole of the vertical dimension is utilized in different languages.

First, I will show how the semantic patterning of up and shàng can be explained in terms of "subjectivity" and "subjectification" (Langacker 1985, 1990, 1999, 2006, 2008).<sup>85</sup> I will introduce some basic terminology and theoretical prerequisites for this discussion in 7.1. After that, in 7.2, I will discuss how subjectification plays a role in the semantic developments of up and shàng, I will argue that the semantic extensions of up and shàng both involve the gradual fading away of onstage conceptual contents, which leaves the role of the conceptualizing subject in the construal more prominent. However, despite their similarity, the semantic poles of these two constructional schemas actually involve different conceptual archetypes.<sup>86</sup> This point will be addressed in 7.3.

Langacker (2006: 28–9) points out that subjectification should be viewed as describing a kind of *relationship* between an original and an extended meaning, instead of as a *mechanism* of semantic change (emphasis original). In other words, the way Langacker proposes to look at subjectification is to investigate the gradual, and perhaps multifaceted, attenuation of the onstage conceptual content in the process of semantic extension. This is also my approach in the present study. Interested readers are referred to Lu (2017a) for a partial and condensed subjectification analysis of *shàng*.

According to Langacker (1999, 2006, 2008), conceptual archetypes are frequent experientially grounded concepts, fundamental and simple gestalts that can be readily apprehended at an early developmental stage. Typical examples include WANT, GO, RUN, A PHYSICAL OBJECT, and THE HUMAN FACE. Based on this definition, conceptual archetype is considered to embrace the notion of image schemas and to be even more general than that (Langacker 2006: 36–7).

Langacker's proposal of conceptual archetype also bears some similarity to Tyler and Evans' (2001, 2003) notion of "proto-scene", which is a schematic spatial-configurational relation between a tr and a lm for a spatial particle. According to the authors, each proto-scene can be associated with at least one functional element that describes the embodied consequence of interaction between the tr and

## 7.1 Subjectivity and subjectification

The concept of subjectivity was first studied by linguists such as Breal (1964 [1900]), Buhler (1990 [1934]) and Jakobson (1957). Benveniste (1971 [1958]) developed a clear definition of subjectivity between the speaking subject and the syntactic subject, describing it as one of the most crucial functions of language. In the 1980s, scholars such as Langacker (1985), Lyons (1982) and Traugott (1989) built on this notion, producing a series of research papers on the subjective function of language. The notion of subjectivity can be roughly defined as "the way in which natural languages, in their structure and their normal manner of operation, provide for the locutionary agent's expression of himself of his own attitudes and beliefs" (Lyons 1982: 102). Since the 90s, research on subjectivity has flourished within the cognitive-functional camp of linguistics.

Langacker and Traugott focus on the notion of subjectivity and its closely associated concept, "subjectification", using their respective theoretical frameworks.<sup>87</sup> Langacker's synchronic approach and Traugott's diachronic approach are two ways of looking at the subjective function of language, and are partially compatible (Langacker 2006: 2; Traugott 2003: 21). However, in the present study, I follow Langacker's way of addressing subjectivity for the following two reasons: First, Traugott's generalization is made using diachronic linguistic data, which is different from the research method of the present study. Second, and more importantly, as has been presented in my earlier analysis, the meanings in use for up and shàng are highly relevant to the image-schematic structure invoked at the conceptual level. The strength of Traugott's theory is not in providing a conceptualist explanation, but in addressing the pragmatics-induced semantic change in diachrony. By contrast, Langacker's version of subjectivity is based on a proposed parallel relation between perception and conception, and this conceptualist approach is much more in line with the observation on imagistic structures that I have presented previously. I will therefore use Langacker's version.

The way Langacker approaches subjectivity and subjectification can be traced back to his seminal publication of 1985, where he did not specifically label the meaning of a linguistic expression as subjective or objective, but only suggested that the degree of subjectivity and objectivity should be addressed relative to

the lm. For instance, Tyler and Evans (2003: 180-2) identify containment to be the functional element of the preposition *in*, and claim that the functional element accounts for the embodied meanings of *in*. In this sense, the notion of proto-scene for a preposition can also be a kind of conceptual archetype.

Traugott (1995) referred to "subjectification" as a diachronic process of semantic change, where the meaning of a lexical item comes to reside in the speaker's mental domain or evaluation. Langacker (1990, 1999), on the other hand, defines subjectification in terms of the synchronic distribution of meaning. To Langacker, subjectification may, but does not necessarily need to, align with diachronic grammaticalization. I use the term subjectification in Langacker's sense.



Figure 7.1: a) Offstage and fully subjectively perceived viewing subject; b) Onstage and partially objectively perceived viewing subject

a particular element within a construal. According to Langacker, a construal is best described in terms of a stage metaphor, which is based on a parallel relation between perception and conception. When the viewer of a theater play is off stage and devotes his full attention to what is happening on the stage, he loses awareness of himself and of his immediate circumstances. In this viewing relationship, there is a maximal asymmetry between the subject and the object of perception, and the offstage viewer is perceived totally subjectively. If, in contrast, the viewer himself is on the stage as a part of the theatrical play, he receives partial attention from himself. As a consequence, the asymmetry between the subject and the object of perception is reduced, and the onstage viewer is, as a result, objectively perceived to an extent. Figure 7.1a and 7.1b depicts the viewing relationship in perception, where the subject of perception is fully subjectively or partially objectively perceived, following Langacker (1985, 1999, 2006, 2008) and Lu (2017: 240-241, Lu 2020: 337-338). SP and OP stand for the subject and the object of perception, and MF and OS for the maximal field of perception and the onstage region. The object of perception is in a bold circle since it receives the highest degree of attention. The dashed arrow from SP to OP represents the attention direction of the subject of conception.

In Figure 7.1a and 7.1b, the subject of perception directs his attention to the object of perception in the onstage region, which is always objectively perceived. The only difference between the two viewing situations is whether SP is included in the maximal field of perception. In 7–1a, SP locates outside of MF, so is not at all aware of his own existence, and therefore acts as a mere viewing subject. In comparison, SP in 7–1b moves into MF and starts to play a more active role in the theater play. It is in this sense that he loses the full status of the subject of perception and becomes partially an object of perception.



**Figure 7.2:** a) Offstage and fully subjectively conceived conceptualizer; b) Onstage and partially objectively conceived conceptualizer

Langacker (1985) proposes a parallel relation between perception and conception, and the model of subjectivity in CG can be constructed after the perceptual model laid out above, as shown in Figure 7.2a and 7.2b, where SC and OC stand for the subject and the object of conception:

Parallel to the perceptual relation set out above in 7.2a, the conceptualizing subject stays offstage and assumes full status of the subject of conception, which is also termed "optimal viewing arrangement" (Langacker 1985, 1987) or "subjective construal" in his later publications (Langacker 1999, 2008). In contrast, as SC moves onto the stage and into the maximal field of awareness, as we see in 7.2b, the conceptualizing subject more actively participates in the construal and loses the original status of the fully conceptualizing subject, which is called "egocentric viewing arrangement" (Langacker 1985, 1987) or "objective construal" (Langacker 1999, 2008).<sup>88</sup>

The gradual development from Figure 7.2a to 7.2b captures exactly what is meant by subjectification, which reflects an increasing degree of involvement of the conceptualizing subject in a construal.<sup>89</sup> To Langacker, a linguistic ex-

The way Langacker uses the terms "subjective" and "objective" differs from how Traugott and other researchers refer to those terms outside the CG paradigm, since Langacker's distinction is based on the prominence of the role played by the conceptualizer and the conceptualized in a construal. An egocentric viewing arrangement is an objective construal of the conceptualizer, since the subject of conception partially plays the role of the object of conception. By contrast, in an optimal viewing arrangement, the conceptualizer is subjectively construed, in the sense that the subject of conception is almost entirely offstage and barely participates in the construal.

<sup>89</sup> Paradoxically, a process of subjectification where the subject of conception receives more attention and becomes increasingly prominent in the onstage region results in a more objective construal of himself. In other words, the conceptualizer is more objectively, or less subjectively, construed as a result of subjectification.

pression may invoke different viewing arrangements in different usage events, with different degrees of participation by the conceptualizing subject. At one extreme, where the conceptualizing subject takes on the full role of the subject of conception, he stays clear of the stage, with his attention fully devoted to the interaction between the objects of conception onstage. Example (7–1) represents this viewing arrangement:

(7-1) The child hurried across the busy street. (cited from Langacker 1999: 301)

In this instance, the conceptualizing subject does not play an active role in the construal. What happens onstage is that *the child*, as the tr of *across*, traverses the lm, which is elaborated by *the busy street*, along a path to physically occupy successive points in space. The subject of conception stays entirely offstage and conceives of the tr occupying various positions from its origin to its destination.

On the other extreme side of subjectivity, we may see participation from the subject of conception in a usage event that also involves *across*. Instance (7-2) represents this other extreme:

#### (7-2) There is a mailbox right across the street. (cited from Langacker 1999: 299)

To fully understand this utterance, we first need to pay attention to the role played by the subject of conception to make this construal possible. Unlike the dynamic tr in (7-1), which physically occupies a location at the source of the path, we cannot find an originating source for the tr of *across* in (7-2), which is elaborated by a mailbox. In order to pinpoint the exact location of the tr of across, the subject of conception now becomes involved by providing a reference point (notated as R in Figure 7.3 below) in this construal. In addition to the participation of the conceptualizing subject as a reference point, the conceptualizing subject also traces the fictive motion of the tr from the reference point to its destination. Therefore, no objective motion is conducted by the tr. Instead of an objective motion of the tr, what makes the construal possible is the direction of his attention to an imaginary mental path by the subject of conception. Figure 7.3a and 7.3b (after Langacker 2006: 23) show the objective motion of the tr in (7-1) and the mental path from R to its final location is in dashed line, indicating no actual motion but only a potential or fictive motion.<sup>90</sup>

<sup>90</sup> The case of *across* was also brought up in Langacker (1999: 300), but the configurations in 1999 and 2006 are slightly different, since in the earlier version, Langacker put the subject of conception outside of the maximal field of awareness. However, since the maximal field of awareness does incorporate some aspect of the conceptualizing subject (Michel Achard, p.c.), it makes better sense to put the conceptualizing subject within the MF, as is the practice in Langacker's 2006 version.



**Figure 7.3:** a) Objective motion by the tr of *across* in (7-1); b) Subjective motion by the subject of conception in (7-2)

As I discussed above, the development from Figure 7.2a to 7.2b constitutes a typical case of subjectification.<sup>91</sup> This process is instantiated here by the development of *across* from Figure 7.3a to 7.3b. In 7.3a, the conceptualizing subject starts as a mere observer who is not involved in what is happening in the onstage region, but in 3b, the conceptualizer becomes an active participant that is both involved as a reference point and engaged in the subjective scanning along the dashed mental path.

The loss of the physical sense of *across* shown in Figure 7.3a and 7.3b exemplifies "attenuation", which is symptomatic of subjectification (Langacker 1999: 301). Langacker points out that, if the onstage conceptual content is completely attenuated, the conceptualizer fully loses his role of the subject of conception and takes on a partial role of the object of conception in a relative sense, leaving behind only a barely tangible version of the original subjective construal. This remaining vestige represents the participation of the conceptualizing subject in an objective construal, which is also immanent in the original subjective construal. In comparison, a construal with an elaborate conceptual content tends to mask the participation of the conceptualizer, rendering his role more subjective, while a construal with a more rarified conceptual content means that the involvement of the conceptualizer in the conceptualization is more salient, resulting in a more objective construal.

This can be illustrated with the above pair of *across*. On one hand, in Example (7-1), the subject of conception participates in the construal only by means of

<sup>91</sup> As I footnoted in the beginning of this chapter, as Langacker (1999: 314–5) has disclaimed, an account based on subjectification is not intended to reconstruct what happened in the diachronic dimension. According to Langacker, the beauty of an analysis based on subjectification is the unified nature that underlies diverse phenomena that in the past were usually regarded as isolated cases.

perceptually scanning along the path traversed by the tr, keeping track of the moving tr all the way through. Given the relatively rich conceptual content of motion in space, this subjective participation passes unnoticed in the conceptualization, which results in his full status of subject of conception and hence a subjective construal. On the other hand, in Example (7-2), the subject of conception similarly directs his attention along the imaginary path in dash, though no actual path is traversed by the onstage tr. Mental simulation is also present in the processing of this particular instance, but without the tangible conceptual content of motion in space, the subjective scanning is more easily noticeable than in (7-1). In comparison, the conceptualizer in (7-2) does not have a full status of the subject of conception, but instead takes on a partial role of the object of conception, hence a more objective construal of him. Therefore, subjectification should be understood as a process of attenuation of the onstage conceptual content which brings the subjective processing to the fore; the subjective processing is present in the conceptualization all along, with the role played by the conceptualizer changing from a totally subjective one to a less subjective, or a more objective one.

According to Langacker (1999), attenuation can be observed along at least four dimensions: change in focus; change in status; change in locus of activity or potency; and change in domain. The ordering of these dimensions is arbitrary. I will measure the paths of semantic extension for *up* and *shàng* against the above four parameters in 7.2.

# 7.2 Subjectification and attenuation in the semantic extension of *up* and *shàng*

In Chapters 4 through 6, I discussed how CG, supplemented with PP, can adequately describe the semantic clustering of up and shàng with the arsenal of constructional schema. I have mentioned in various places the presence of subjectification and attenuation in both semantic networks. Below, I turn to a detailed discussion of the respective semantic clusters of up and shàng in terms of subjectification and attenuation.

## 7.2.1 Change in status in the semantic extension of up and shàng

Langacker's (1999) first criterion of attenuation refers to a change in the nature of motion from an actual one to a potential one, and from a specific one to a generic one. A comparison of Examples (7-1) and (7-2) instantiates a change in status, in the sense that *across* in (7-1) codes an actual trajectory in space traversed

by a specific tr, while the motion in (7-2) is a potential one, possibly carried out by a generic tr.

Following the above criterion, a change in status is present in the semantic extension of up. First, the sense of 'approaching' invokes an upward trajectory which is not an actual motion in space but only a simulated movement observed from a certain perspective, if we compare it to 'vertically higher'. A comparison between (4–9) and (4–17), repeated here as (7–3) and (7–4), illustrates this point.

(7-3) I was able to soar up, to fly, I could rock in the air like that balloon.
(7-4) The Doctor set off down the slope. Francis caught up with him.

Excerpt (7–3) is a typical instance of 'vertically higher', where up encodes an actual vertical motion in space. But in (7–4), up linguistically elaborates not an actual motion, but merely a non-vertical motion observed from an onstage point of view.

A further examination of the extension from 'approaching' to 'completive' also attests to a change in status, in that the upward trajectory no longer has to do with an actual motion in any sense. Rather, the sense of motion has completely faded away and leaves behind only a barely identifiable residue of mental scanning by the subject of conception. A consideration of (4-25), which is a typical case of 'completive', repeated here as (7-5), attests to the above point.

#### (7-5) Now he'll come up with all sorts of bright ideas like tying me up or pumping me full of tranquillizers for my own safety.

A comparison of (7–4) and (7–5) reveals a further change in status. In (7–4), although the trajectory is non-vertical, it is still instantiated in the domain of SPACE. However, no spatial sense can be observed in (7–5). The upward trajectory has completely lost its status as an actual motion and has shifted into a potential motion instantiated in an abstract conceptual domain.

Moreover, a change in status is also witnessed in the semantic extension from the prototypical sense to the metaphorical senses, since the upward trajectory for these metaphorical senses is similarly not an actual motion but only a generic mental simulation in non-spatial conceptual domains. Excerpt (5–2), repeated here as (7–6), is an example:

(7-6) By experimenting with the languages of several indigenous nations, they formed a pidgin with which they could communicate. Then she began to pick **up** English with astonishing rapidity.

Following the same parameter, a change in status can also be observed in the semantic network of *shàng*. The sense of vertical motion is lost in the extension from 'vertically attained' or 'vertically higher' to 'forward', since the latter is not an actual upward motion but a fictive trajectory observed from an onstage vantage point. A look at Excerpts (6–1) and (6–24), repeated here as (7–7) and (7–8), is indicative of the change in status:

(7-7)	擔心 <i>dānxīn</i> worry	這場雪 <i>zhè-chăng-x</i> this-CL-sno	<i>cuě</i> DW	太 <i>tài</i> too	大, dà big	屋頂 <i>wūdĭng</i> roof
	吃不住, <i>chī-bú-zhù</i> contain-NH	CG-PFV	待會 <i>dàihuì</i> later	我 wǒ I	爬上 <i>pá-shàng</i> climb-SHANG	屋頂 <i>wūdĭng</i> roof
	去 qù go	鏟一鏟 <i>chǎn-yì-chǎ</i> shovel-TNT	ín TV-RED	雪。 <i>xuě</i> snow		

"(I) worry that the snow is too heavy for the roof to take. Later, I'll climb onto the roof to shovel the snow."

(7-8)	她	顯然	舒服	多	了…	我
	tā	xiănrán	shūfú	duō	le	wŏ
	she	obviously	comfortable	much	CRS	Ι
	又	倒了	杯	水,	送上	藥
	yòu	dào-le	bēi	shuĭ	sòng-shàng	yào
	again	pour-PFV	cup	water	give-SHANG	medicine

"She obviously felt better... I poured another cup of water and gave (her) the medicine."

In (7-7) and (7-8), *shàng* goes through a change in status. In (7-7), *shàng* encodes an actual upward motion to the roof, while in (7-8), *shàng* elaborates a non-vertical motion reported from an onstage point of view. However, the trajectory is not vertical in essence but only *appears* vertical via the intervention of the non-default point of view, hence the motion is potential.

A change in status can also be seen in the extension from 'vertically attained' to 'attached', in the sense that the upward trajectory in 'vertically attained' is an actual motion in space, whereas it is much less so in the cluster of 'attached.' If we compare (7-7) with (6-28), repeated here as (7-9), the contrast is clear:

#### 7 Subjectification, Attenuation and Conceptual Archetypes

(7-9)	房屋	外,	都	刷上	不同
	<i>fángwū</i>	<i>wài</i>	<i>dōu</i>	<i>shuā-shàng</i>	<i>bù-tóng</i>
	house	outside	all	brush-SHANG	different
	的	顏色,	看起來	有點	像
	de	<i>yánsè</i>	<i>kàn-qĭlái</i>	<i>yǒudiǎn</i>	<i>xiàng</i>
	LK	color	look-IPFV	a little	LK
	童話 <i>tónghuà</i> fairy tale	世界。 <i>shìjiè</i> world			

"Outside of (the) houses is/was painted with different colors, (which) look like a fairy-tale world."

A loss of the vertical sense is evident as we juxtapose the examples. *Shàng* in (7–7) bears a strong sense of vertical elevation and a sense of attachment, depicting the primary figure's upward trajectory to the roof and the final state of staying on that particular surface, whereas *shàng* in (7–9) codes merely the state of paint being attached to the surface without following an actual vertical trajectory prior to that. Therefore, the vertical trajectory is actual in 'vertically attained' but only potential in 'attached'.

A change in status is also evident in the extension from 'attached' to 'completive' and finally to 'inceptive'. If we compare Excerpts (6-33) and (6-39), which are repeated here as (7-10) and (7-11), the above point becomes clear:

(7-10)	白兔 <i>báitù</i> rabbit	笑得 <i>xiào-dé</i> laugh-PFV		嘴唇 <i>zuĭchún</i> lip	都 <i>dōu</i> PRT	裂開 <i>liè-kāi</i> split-open
	了, le CRS	一直 <i>yìzhí</i> until	到 <i>dào</i> to	現在 <i>xiànzài</i> now	還 <i>hái</i> still	沒有 méiyǒu NEG
	合上。 <i>hé-shàng</i> come tog	gether-SHA	NG			

"The rabbit kept laughing until its lips split, and its lips have still not come together."

(7-11)	對 duì about	佛法 <i>fófǎ</i> Budd	hism	有了 <i>yǒu-le</i> baye PFV	更 gēng	進一步 <i>jìnyíbù</i> further	的 de L K
	認識, rènshì understar	nding	她 <i>tā</i> she	オ cái PRT	瞭解 <i>liǎojiě</i> understand	其中 <i>qízhōng</i> I within	意涵 <i>yìhán</i> meaning
	並 <i>bìng</i> and	逐漸 <i>zhújid</i> gradu	ìn 1ally	迷上 <i>mí-shàn</i> addict-S	g SHANG	佛學。 <i>fó-xué</i> Buddhist-stu	ıdy

"After she had more thorough knowledge of Buddhism, she came to understand its real meaning, and was getting more and more addicted to the study of Buddhism."

In comparison, the conceptual element of an actual SURFACE is intact in (7-9) as an instantiation of 'attached' but is much less so for the *shàng* meaning 'completive' in (7-10), which invokes only a conceptual remnant of CONTACT. Furthermore, the conceptual content of actual CONTACT is even further reduced in (7-11) as a typical instance of 'inceptive' and becomes only a potential and abstract closeness in the psychological domain.

### 7.2.2 Change in focus in the semantic extension of up and shàng

The second parameter of attenuation (Langacker 1999) is a change in conceptual profile. As we examine (7-1) and (7-2) again, it is the PATH that stands out from the conceptual base in (7-1) and the GOAL that gets the most attention in (7-2). Given the above shift in conceptual profile, a change in focus is evident.

As we turn to measure the semantic network of up against this criterion, we can see that a change in focus is obvious. In particular, the profiled elements are different among the core senses. For the prototypical sense of 'vertically higher', it is the PATH that receives the most attention, while the sense of 'approaching' is both PATH- and GOAL-prominent. A comparison between Instances (4–10) and (4–3), repeated here as (7–12) and (7–13), illustrates this claim:

- (7–12) Practice had made perfect: she hardly made a sound. Peter slept on. Rung by rung, she crept **up** the ladder.
- (7-13) She swam in what she hoped was the direction of the stairs, only to come **up** against a wall.

The above two instances profile different bits of a similar conceptual base. In (7–12), what is brought to focus among the SOURCE-PATH-GOAL schema is the

portion of PATH, and in (7–13), it is the PATH and the GOAL that are underscored. Therefore, a shift in focus is obvious in the extension from 'vertically higher' to 'approaching'.

The extension to 'completive' involves a further shift in focus, since the sense is exclusively GOAL-prominent. If we consider (4–26), shown again here as (7–14), the shift in focus is clear:

(7–14) The smell is so terrible you want to throw up. The men have been locked **up** in their cells since day one of their imprisonment.

A comparison between (7-13), which is a typical instance of 'approaching', and (7-14), which is an instantiation of 'completive', shows that an important conceptual difference between the two senses is a shift in conceptual profile. In particular, what is conceptually highlighted in (7-13) is the PATH and the GOAL, whereas the profiled element in (7-14) is the endpoint, or the GOAL, of the processual predication.

With the above illustrations from (7-12) to (7-14), I have shown that in the semantic development of up, there is a gradual shift in profiling from PATH to GOAL, with an intermediate stage in between, which attests to the parameter of change in focus. On the other hand, a change in focus is also present in the semantic network of *shàng*, especially in the extension from 'vertically attained' to 'attached'. A juxtaposition of (6–2) and (6–29), replicated here as (7–15) and (7–16), illustrates this claim:

(7-15)	完工 <i>wángōng</i> finish	的 de LK	時候, <i>shíhòu</i> when	他 <i>tā</i> he	登上 <i>dēng-shàng</i> mount-SHANC	, y
	城牆, <i>chéng qiáng</i> city wall	從 g <i>cóng</i> from	東門 <i>dōng mén</i> East Gate	到 <i>dào</i> to	北門, <i>běi mén</i> North Gate	巡視了 <i>xúnshì-le</i> patrol-PFV
	一周。 yì zhōu					

one circle

"When (the construction work was) finished, he climbed onto the top of the city wall, and patrolled from the East Gate to the North Gate to examine (the construction)." 7.2 Subjectification and attenuation in the semantic extension of up and shàng

(7-16)	社會科學院, shèhuì kēxuéyuàn				管理學院, <i>guǎnlǐ xuéyuàn</i> Faculty of Management			夜間部, yèjiān bù	
	Faculty of Social Studies		s	Evenin				g Division	
	及	農學	:院,			所有	教室		的
	jí	nóng	xuéyuàr	1		suŏyŏu	jiàoshì		de
	and Faculty of Agric		gricu	lture	all	classroc	m	LK	
	外牆,		被	噴	上		藍色	油漆	й о
	wài qiáng		bèi	pē	n-shàn	g	lánsè	yóuq	<i>Ţ</i> Ī
	external w	all	PASS	sp	ray-SH	IANG	blue	pair	nt

"At the Faculty of Social Sciences, Faculty of Management, Evening Division, and Faculty of Agriculture, the external walls of all classrooms were sprayed with blue paint."

As can be seen in (7-15) and (7-16), the conceptual profile of [V] – [SHANG] shifts from being both PATH– and GOAL-prominent to being exclusively GOAL-prominent. In (7-15), *shàng* 'vertically attained' involves an upward trajectory elaborated by the verb of mounting, and a surface as the destination, elaborated by *chéng qiáng* 'city wall'. These elements encode both the PATH and the GOAL. In (7-16), for *shàng* 'attached', it is the external wall of the building as a SURFACE, or the GOAL, that receives the most attention, with the trajectory of the paint receiving relatively much less attention. Therefore, a shift in focus is evident.

In addition to that, there is a change in focus in the extension from 'completive' to 'inceptive', which results from the verb types that collocate with *shàng*. For illustration, consider (6–34) and (6–38), replicated here as (7–17) and (7–18) respectively:

(7-17)	印表機	和	光碟機	只要	插上
	<i>yìnbiǎo-jī</i>	<i>hàn</i>	guāngdié-jī	<i>zhǐyào</i>	chā-shàng
	printer	and	CD-ROM	as long as	plug-SHANG
	線, <i>xiàn</i> cable	即 jí PRT	可 kě can	使用。 <i>shĭyòng</i> use	

"(Nowadays,) printers and CD-ROMs can be used as long as they are plugged in."

#### 7 Subjectification, Attenuation and Conceptual Archetypes

(7-18)	萬一	他	追上了	別的	女孩,
	<i>wànyī</i>	<i>tā</i>	<i>zhuī-shàng-le</i>	<i>bié de</i>	<i>nǚhái</i>
	what if	he	chase-SHANG-PFV	other	girl
	或者是	我	愛上	你,	那
	<i>huòzhěshì</i>	wŏ	<i>ài-shàng</i>	<i>nĭ</i>	<i>nà</i>
	or	I	love-SHANG	you	then
	怎麼辦? <i>zĕnmebàn</i> what to do				

"What if he met another girl, or if I fell in love with you, what shall (we) do?"

As we can see, (7-17) is an instance of *shàng* 'completive', which encodes the resultant state of two objects coming to potential CONTACT, or the GOAL of the simulated mental trajectory if put in the SOURCE-PATH-GOAL schema, while with *shàng* 'inceptive' in (7–18), it is not the state of entering CONTACT that gets profiled but rather the state *following* CONTACT, i.e. the state of two entities remaining close, or the resultant state of reaching the GOAL in the mental simulation in terms of the SOURCE-PATH-GOAL schema. Hence, a change in focus is also obvious in the transition between these two senses.

## 7.2.3 Change in domain in the semantic extension of up and shàng

The criterion of change in domain is also straightforward in both semantic networks. For *up*, the core senses of 'vertically higher' and 'approaching' are both instantiated in the domain of SPACE, while 'completive' no longer has to do with SPACE but with TIME instead. This is also the case in the semantic network of *shàng*. Its senses of 'vertically higher', 'forward' and 'vertically attained' are strictly instantiated in the domain of SPACE, whereas the other meanings are less typical of this concrete domain; this is especially true for 'completive' and 'inceptive'.

# 7.2.4 Change in the locus of activity or potency in the semantic extension of *up* and *shàng*

According to Langacker (1999), the final parameter of attenuation is a change in the locus of activity or potency. A comparison between (7-1) and (7-2) again illustrates this criterion. For (7-1), the mover is an onstage profiled participant,

but in contrast, the mover in (7–2) is no longer onstage, but is the offstage and default conceptualizer; hence there is a change in the locus of activity.

For the semantic network of up, attenuation can be observed with respect to the above parameter. The locus of potency of the upward movement for 'vertically higher' resides almost entirely in the onstage tr, with minimal participation of the conceptualizer. In contrast, in the usage of 'approaching', the onstage tr is not the exclusive locus of potency of the upward movement. Rather, it is only in the eye of the onstage conceptualizer that the non-vertical motion of the tr is coupled with an upward trajectory, hence the locus of potency has somewhat shifted, given a greater extent of participation of the conceptualizer. Consider (4–12) and (4–19), repeated here as (7–19) and (7–20), for clarification:

- (7-19) ... projects ranged from rock hauling, taking rocks out of the creek, picking them **up**, hauling them up the hill, putting them in a pile.
- (7–20) Further along the road there's another gate. You'll come across the house half-way **up** the drive.

The locus of activity is different in the above examples. On one hand, for (7-19), the locus of the upward motion resides completely in *rocks* as the actual onstage participant that travels in SPACE. On the other hand, the locus of the upward motion in (7-20) resides not in the onstage tr but in the conceptualizer projected to the onstage region, since as we discussed in 4.3, the upward trajectory is merely a potential motion simulated by the onstage conceptualizer.

A closer scrutiny of 'completive' reveals a further shift of the locus of potency, since for 'completive', the locus of potency no longer resides in the profiled onstage tr but in the offstage and default conceptualizer, with the remnant of the upward trajectory toward an endpoint existing only in the mental simulation of the conceptualizing subject.

Based on the same parameter, attenuation can also be observed in the semantic development of *shàng*. As I showed in Chapter 6, the extension from 'vertically higher' to 'forward' involves an onstage conceptualizer, and it is only through the existence of the onstage conceptualizer that the orientation of UP can be coupled with FORWARD. Therefore, unlike the sense of 'vertically higher,' the locus of potency of motion for the cluster of 'forward' does not reside exclusively in the onstage *tr* but partially in the onstage *conceptualizer*. A comparison between (6–3) and (6–6), replicated here as (7–21) and (7–22) substantiates this claim:
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(7-21)	從	海	中	升上	海面	登陸
	<i>cóng</i>	<i>hǎi</i>	zhōng	<i>shēng-shàng</i>	<i>hǎimiàn</i>	<i>dēnglù</i>
	from	sea	LOC	rise-SHANG	sea surface	land
	時,	拍	岸	的	浪潮	變
	<i>shí</i>	<i>pāi</i>	<i>àn</i>	de	<i>làngcháo</i>	<i>biàn</i>
	when	pat	shore	LK	waves	become
	兇 <i>xiōng</i> mean	了。 le CRS				

"When (everyone) went up from under to the sea surface, the waves that lapped the shore became stronger."

(7-22)	幹員	發覺	郭長榮		準備	逃逸,
	gànyuán	yuán fājué guō chángróng		róng	zhŭnbèi	táoyì
	agent	find	Guo Chai	ngrong	ready	escape
	立即	擁上,		逮捕	郭	嫌。
	lìjí	yŏng-shàng		dàibŭ	guō	xián
	immediate swarm-SHANG		HANG	arrest	Guo	suspect

"(When) the agent(s) found that Guo Changrong was about to escape, (they) immediately swarmed to arrest the suspect, Mr. Guo."

The locus of activity in the above examples is different. In the former the locus is the onstage tr, and in the latter it is the onstage conceptualizer. The potency of the upward motion in (7-21) resides entirely in the unspecified tr, whereas in (7-22) the potency of the vertical trajectory does not lie in the tr, but partially in the onstage conceptualizer that coincides with the agent. This is because it is only through the intervention of the onstage vantage point that the non-vertical motion of the tr, gànyuán 'agent', can be construed as being vertical.

We can see a similar shift in the locus of potency in the extension from 'vertically attained' to 'attached'. For the meaning of 'vertically attained', the locus of potency of the upward movement resides completely in the onstage tr, whereas in the cluster of 'attached', the onstage conceptual content of VERTICAL ELEVATION has faded away, with the upward trajectory being only a barely identifiable trace that exists only in the conceptualizer's mental scanning.<sup>92</sup> Compare (7–15) with (6–31), which is repeated here as (7–23), and the above claim will become evident:

<sup>92</sup> The conceptual archetype of vertical elevation can be seen as a combination of two basic image schemas, viz. the SOURCE-PATH-GOAL schema plus the vertical schema. However, such a fine-grained analysis would not help much in understanding the difference between *up* and *shàng*, since vertical elevation is a shared commonality between the two. Therefore, I present the conceptual representation at this level of specificity and not in a more detailed manner.

(7-23)	我	就	用	一張	紙,	寫上
	wŏ	jiù	yòng	yì-zhāng	zhĭ	xiě-shàng
	Ι	PRT	use	one-CL	paper	write-SHANG
	「媽媽	過	節	快樂」	六個	字。
	māma	guò	jié	kuàilè	liù-ge	zì
	mother	pass	holiday	happy	six-CL	character

"I then used a sheet of paper and wrote on it six characters: Happy Holiday, Mom!"

The locus of potency in the above instances resides in different participants in a conceptualization. In (7–15), the conceptual content of VERTICAL ELEVATION is linguistically elaborated and the potency is present in  $t\bar{a}$  'he' as the onstage tr. However, the locus of potency in (7–23) does not lie in an onstage participant and the conceptual content of VERTICAL ELEVATION is not even identifiable. This is because the locus of potency has shifted entirely to the offstage conceptualizer, with the conceptual content remaining only in the conceptual base and the locus of potency residing only in the conceptualizer's mental scanning.

Attenuation can also be observed in the extension from 'attached' to 'completive', in the sense that the conceptual content of REST ON A SURFACE has been further reduced in 'completive', where the element of SURFACE is no longer strictly identifiable, leaving behind only a less elaborate CONTACT. The attenuation of the onstage conceptual content reveals the mental simulation of the conceptualizer, so that it comes to be considered the main locus of potency of the sense of attachment. In addition, attenuation is also present in the extension from 'completive' to 'inceptive', since for the sense of 'inceptive', the profiled element has shifted to the resultant state after two entities enter a state of CONTACT. The potency of this change in the windowing of attention cannot be attributed to any onstage profiled participant, but resides in the default conceptualizer.

#### 7.2.5 Interim summary for the semantic extension of up and shàng

Up to this point, I have showcased how the semantic extension for up and shàng are clear cases of attenuation and subjectification. I first showed that the polysemy of up should be understood as a case of subjectification based on the conceptual archetype of VERTICAL ELEVATION, as a result of attenuation along various dimensions in Langacker (1999). I similarly argued for the presence of attenuation and subjectification in the semantic development of [V] – [SHANG]. In particular, I showed that the semantic extension of shàng should be understood as a case of subjectification based on the conceptual archetypes of VERTICAL ELEVATION and REST ON A SURFACE, as a result of attenuation along various dimensions.

### 7.3 Domains, co-text and semantic attenuation

In this section, I will analyze the textual level and discuss the possible connection between change in co-text and semantic attenuation. In particular, I will show how change in co-text can induce semantic extensions of up and shang from the concrete domain to an abstract domain.

Remember that "A-D alignment" (Langacker 1987) and "conceptual unity of domain" (Croft 1993) constitute an important part of our previous discussion. These two notions help us understand that variation in co-text, especially change in the collocating verb, is an important factor to the semantic attenuation of up and shang. The verb plays a pivotal role for the conceptual dependence of up and shang relative to the verb, and the possible repertoire of domains associated with the verb influences the semantics of the particles, as I showed in Chapter 5.

A scrutiny of the verbs in [V] - [UP] and [V] - [SHANG] illustrates this claim. For 'vertically higher' and 'vertically attained', all their collocating verbs are instantiated in the domain of space, and invoke a vertical motion. The verbs that precede up 'approaching', *shàng* 'forward' or *shàng* 'attached' are also instantiated in the domain of space, and invoke a motion that is non-vertical. Hence, we can see that a change in the verbal collocations in the route of semantic extension can be associated with the fading away of the conceptual content of VERTICAL ELEVATION. As we further examine the verbs that co-occur with the completive readings of up and *shàng*, we can see that the verbs no longer invoke the conceptual substrate of VERTICAL ELEVATION, and that the absence of physical sense should be seen as a further step of the semantic shift from the domain of SPACE.

However, the completive readings of *up* and *shàng* are both as temporal concepts, which means that the semantic clusters are instantiated in the domain of TIME. How does this abstract domain of TIME come into play?

In addition to semantic attenuation, the other key to explaining the semantic extension from SPACE to TIME is the processual nature of verbs (Langacker 1987, 1999). According to Langacker, verbs are processual predications, as opposed to non-processual predications such as nouns, adjectives, prepositions and other parts of speech. This means that TIME is an inherent element in a verb, regardless of its semantics. Therefore, as the verb loses its spatial nature in the usages of *up* and *shàng* 'completive', the concept of TIME, which has always been there, is revealed and causes the entire usage event to be instantiated in the domain of TIME.

# 7.4 Conceptual archetypes in the embodied meanings of *up* and *shàng*

So far, I have discussed how the various core meanings of up are extended from its prototypical meaning of 'vertically higher', with the other senses more or less reflecting this prototype as a result of semantic attenuation. I have also addressed how the core senses of *shàng* extend from its sanctioning sense of 'vertically attained', and how the conceptual archetype of REST ON A SURFACE is involved in some of its core senses. Below, I address the role played by conceptual archetypes in the semantic networks of up and *shàng*.

### 7.4.1 Archetypal conception and the core meanings of up

According to Langacker (2008: 538), the prototypical meaning of a grammatical notion is "an objectively construed conceptual archetype." For our current case of up, its prototypical meaning of 'vertically higher' is the conceptual archetype of VERTICAL ELEVATION construed most objectively, with the most onstage conceptual content and the lowest extent of participation from the conceptualizing subject. As I showed in 7.2, along its course of semantic extension, the onstage conceptual content of vertical motion is gradually diminished, but the subjective mental scanning which is also present in the objectively construed meaning remains. The above attenuation of the onstage conceptual content bears two important consequences: First, it results in a more prominent degree of participation from the conceptualizing subject for 'approaching' and 'completive'. Second, it results in a more abstract residue of VERTICAL ELEVATION in 'completive'. This remnant is schematic in the sense that it exists both in the more subjectively construed version and in the objectively construed version of VERTICAL ELEVATION. Therefore, this most subjectively construed meaning of 'completive' should be viewed as a highly schematized version of VERTICAL ELEVATION.

Following from this argument, the relation between the core senses of up and their conceptual substrate of VERTICAL ELEVATION can be described as follows: each of the three core senses is a symbolic representation abstracted from their respective sub-groups of exemplars. Each usage cluster has its own distinct pattern of co-text at the phonological pole; at the semantic pole, each usage cluster also prompts a distinctive imagistic structure. As has been discussed above, a juxtaposition of the core senses forms a clear case of semantic attenuation, which is reflected by the change from a solid vertical line to a dotted one at the semantic pole, which I showed previously. Finally, at the semantic pole, an instantiation of

VERTICAL ELEVATION with the highest level of schematicity is inherent in all the core senses of up and their local instantiations.<sup>93</sup>

### 7.4.2 Archetypal conception and the core meanings of shàng

In this section, I show that the prototypical meaning of *shàng* 'vertically attained' involves the additional conceptual archetype of REST ON A SURFACE, in addition to VERTICAL ELEVATION.

My previous analysis showed that the semantic network of *shàng* subsumes two tracks of semantic extension: one from 'vertically attained' to 'vertically higher' and 'forward'; and the other from 'vertically attained' to 'attached' and finally to 'completive' and 'inceptive'. I discuss each of these two tracks below.

The first route of meaning extension is largely based on the conceptual archetype of VERTICAL ELEVATION. The prototypical sense of 'vertically attained', following Langacker's claim, should be considered VERTICAL ELEVATION and REST ON A SUR-FACE construed in the most objective manner. The subsequent sense along this track, 'vertically higher', as I have mentioned, is similar to the prototypical sense due to their shared conceptual content of VERTICAL ELEVATION and to an objective construal of the conceptual content. The next sense along this track, 'forward', is a result of the vertical sense being reduced, resulting in some residue of VERTICAL ELEVATION that is immanent in all the three senses. This remnant is schematic in the sense that it exists both in the objectively construed 'vertically attained' and 'vertically higher', and in the less objectively construed 'forward'.

The second route of meaning extension involves the conceptual archetype of REST ON A SURFACE, in addition to VERTICAL ELEVATION. Since the sense of vertical motion and the sense of physical contact are rather obvious in *shàng* 'vertically attained', this usage cluster instantiates both conceptual archetypes construed in the most objective manner. In comparison, as we move to the meaning of 'attached', the vertical sense is much less evident, with the conceptual content of VERTICAL ELEVATION having become weaker and construed less as an object of conception. But for 'attached', the archetypal meaning of REST ON A SURFACE is less

<sup>93</sup> The present account of the semantics of *up* and *shàng* is usage-based, and should not be misidentified with a "monosemic" account (Ruhl 1989, 2002), which assumes one single abstract meaning for each lexical item, from which all its uses can be generated by rules. A major challenge to this proposal is whether the abstract meaning can allow us to generate the actual and precise range of how the lexical item is conventionally put to use (Langacker 2008: 38). Accordingly, the single abstract representation alone would fail to fully and accurately describe a speaker's knowledge of the actual usage of a lexical item. In addition, a monosemic account does not say anything about the relationship between all usages of a lexical item, claiming only the possibility of generating the various usages from the central abstract meaning. This feature is also quite different from my usage-based account, which is founded on an observation of semantic attenuation.

obvious and is construed less objectively, with the sense of verticality imminent in REST ON A SURFACE having faded away. As we get to 'completive', we can see that this conceptual archetype is further reduced, with the element of SURFACE having faded away, leaving behind only a residue of potential physical CONTACT. Finally, as for the inceptive meaning, the conceptual content of CONTACT has further diminished and has become barely readily identifiable. For this final usage cluster of 'inceptive', with very little conceptual content remaining onstage, the status of CONTACT as the sole object of conception can no longer be retained, since the mental simulation of the conceptualizer now plays a more prominent role in the construal. By the same token, since the archetypal meaning of VERTICAL ELEVATION has greatly attenuated, it likewise barely plays a role of an object of conception. At this stage, the conceptual substrates are instantiated in a highly abstract manner, and this abstract instantiation is schematic, since both traces of the archetypal meanings are present in all the senses along this path.

Based on the above discussion, the relation between the core senses of shang and the associated conceptual archetypes, VERTICAL ELEVATION and REST ON A SURFACE, can be summarized as follows: similar to what we have seen for up, each sense of shang is also an aggregation of sub-groups of exemplars and has its own characteristics at both the phonological and the semantic pole. The most schematic version of the conceptual archetypes is similarly immanent in all instantiations. However, for the senses of 'vertically attained', 'attached', 'completive' and 'inceptive', the conceptual archetype of REST ON A SURFACE is also involved, in addition to VERTICAL ELEVATION.

# 7.4.3 Schematized archetypal meaning in the metaphorical meanings of *up*

In this section, I address the role of schematized archetypal meaning in the metaphorical meanings of up.

In Chapter 5, I showed how the various metaphorical transfers of up from SPACE to abstract domains are induced by an autonomous predication in its cotext. Now that we have seen how the core meanings can instantiate a conceptual archetype with different levels of specificity of conceptual content, this question arises: Do the metaphorical senses also instantiate the same conceptual substrate with the core senses? If so, in what way?

The answer to this question depends on the parameters of attenuation in Langacker (1999). According to these parameters, the metaphorical senses should be viewed as an attenuated version of the prototypical sense, for two reasons. First, a change in status is evident in the semantic extensions, since the prototypical sense of 'vertically higher' instantiates an actual upward motion, whereas the metaphorical senses only instantiate an abstract upward motion, as a result of the fading away of the conceptual content that leaves behind only the subjective mental scanning. Second, an obvious shift in domain from SPACE to abstract ones is witnessed. Therefore, semantic attenuation is straightforward in the development from 'vertically higher' to the metaphorical senses.

This attenuated version of upward motion is also immanent in the prototypical sense, and is hence schematic. Put another way, what occurs in the abstract domains is a schematic version of VERTICAL ELEVATION, which is construed in a less objective manner than the prototypical meaning. Therefore, each of the metaphorical senses, along with the prototypical sense, elaborates the schematic VERTICAL ELEVATION in its own fashion at the semantic pole, with each metaphorical sense also accompanied by its own pattern of co-text at the phonological pole.

With the above discussion, I have shown that the elements of archetypal conception, schematization, and the participation of the subject of conception are three crucial components in making sense of the semantic network of up and *shàng*. These three elements work in a collaborative fashion and on meanings instantiated in all conceptual domains.<sup>94</sup>

<sup>94</sup> Although the metaphorical senses of *shàng* are not covered here, I would expect to see a similar mechanism at work in that part of its semantic network.

## 8 THE MAKING OF LEXICAL MEANING

The preceding study addresses the puzzle of whether and how the positive pole of the vertical dimension, verbalized in English as *up* and in Mandarin as *shàng*, exhibits different patterns of semantic extension when compared cross-linguistically. My discussion up to this point has revealed that the different repertoires of conceptual archetypes with which each of the target words is associated lead them down different paths of meaning extension and thus result in different semantic networks.

However, a comparison between up and shàng would not be complete without also addressing their commonalities in full. Accordingly, this question remains: If archetypal conception is the key to the differences between up and shàng, can it also provide an explanation for all the similar meanings of [V] - [UP] and [V] - [SHANG]? I deal with this issue in 8.1, returning to the role of conceptual archetypes in cross-linguistic research of lexical semantics.

I have discussed the notions of attenuation, subjectification, schematization and archetypal conception, which are all important cognitive mechanisms that help model the semantic networks of up and shang. In 8.2, I will answer this ultimate question: Are the above cognitive principles which motivate the semantic networks of up and shang specific to each language? Put another way, what is the relationship between these principles and basic human cognitive abilities? Do they reflect an autonomous or a non-autonomous view of language?

Having answered the above inquiries, I will close with the limitations of the present study and suggest issues for future research in 8.3.

### 8.1 Lexical semantics in cross-linguistic comparison

In this section, I will explore whether the notion of conceptual archetype may help scrutinize and compare the semantics of [V] – [UP] and [V] – [SHANG].<sup>95</sup>

As I showed in previous chapters, up 'completive' and shàng 'completive' are different in terms of their archetypal meanings. On one hand, up 'completive' elaborates the archetypal concept of vertical elevation construed in the least objective manner, since the onstage conceptual content of upward motion has completely faded away, leaving behind no onstage conceptual content as the object of conception. The aspectual meaning thus resides exclusively in the mental simulation (performed by the subject of conception) of an entity following an upward path and arriving at a goal. On the other hand, shàng 'completive' instantiates an archetypal combination of vertical elevation and rest on a surface, with vertical elevation being completely stripped away and with part of surface reduced, which leaves behind only a trace of contact. Here, vertical elevation is similarly construed least objectively, since it has fully attenuated, while rest on a surface is still midway to full attenuation. Therefore, if we compare that to up 'completive', the onstage conceptual content of *shàng* 'completive' has not yet attenuated to an extreme, with the aspectual meaning residing not entirely in, but only partially in, the mental scanning by the subject of conception. Following the above argument, the conceptual divergence between up 'completive' and shang 'completive' is twofold. First, although they form cross-linguistic counterparts under certain circumstances, their conceptual substrates differ. In addition to that, the two semantic categories also differ in terms of their degree of attenuation, with the construal of up 'completive' involving no identifiable onstage conceptual content, and that of *shàng* still involving the onstage conceptual content of contact.

A comparison between the completive senses of *up* and *shàng* have hence revealed a paradoxical truth: although *up* and *shàng* share a concrete sense of 'vertically higher', which instantiates the same conceptual archetype, the 'completive' senses associated with the positive pole of the vertical dimension in the two languages result from distinct conceptual substrates. The two sets of highly attenuated archetypal concepts, as a consequence, come to express similar aspectual meanings via attenuation, or subjectification if construed from another perspective, given the pivotal role of the mental simulation by the subject of conception.

Now that I have fully addressed the semantic similarity between up and *shàng*, I am now in a position to discuss the implications of the present study for cross-linguistic research of lexical semantics. The present study accentuates the importance of the following elements in cross-linguistic research on lexical se-

<sup>95</sup> My analyses in Chapters 4 to 6 only allow us to compare the core senses of *up* and *shàng*, since the metaphorical senses of *shàng* remain yet to be investigated.

mantics: conceptual archetype; semantic attenuation; and subjectification.

The notion of conceptual archetype is the most important of these three since, as I have shown, a semantic analysis based on conceptual archetype can explain why analogous words in two or more languages may come to develop different semantic networks, in spite of their partial semantic and functional overlap. Seemingly similar senses of such cross-linguistic counterparts can also find an explanation in archetypal conception, and it may turn out that similar senses across languages are in essence conceptually distinct.

Attenuation is the second important component in cross-linguistic semantic analysis. This is because distinct sets of conceptual substrates may, by means of attenuation, turn into subjectified senses that reside largely, or in some cases only, in the mental simulation performed by the subject of conception. Such subjectified archetypal meanings across languages may come to overlap to a certain extent.<sup>96</sup> Hence, one would not be able to account very well for such semantic similarity between abstract meanings of cross-linguistic counterparts unless the twin factors of attenuation and subjectification are taken into consideration.<sup>97</sup>

### 8.2 Residence of meaning in basic human cognitive abilities

In addition to the implications for cross-linguistic research on lexical semantics, the present study also bears implications for Cognitive Linguistics in general. The present study reflects the relation between lexical meaning and the following human cognitive factors: mental simulation; archetypal conception; schematization; and most importantly, the close relation between perception and conception.

Firstly, I showed that subjective processing, i.e. mental simulation by the subject of conception, exists in all the senses of up and shang, ranging from the prototypical sense, involving the most onstage conceptual content, to the most attenuated sense, which invokes the least onstage conceptual content. Along the way, the gradual bleaching of the onstage conceptual content gives the inherent subjective processing an increasingly prominent role in conceptualization; hence, attenuation of the onstage conceptual content is essentially no different

<sup>96</sup> I doubt the existence of perfect cross-linguistic correspondences and suspect that semantic categories are highly language-specific. Interested readers are referred to Croft's (2001) argument of the radically conventional nature of syntactic categories and its application in comparative stylistics in Verhagen (2012). Readers are also referred to various cross-linguistic studies based on parallel texts (such as Lu 2020, and the references therein).

I suspect that such a claim may not only hold for a cross-linguistic comparison but also for a comparison between analogous constructions within one single language. Lindner (1983), for instance, observes that up is sometimes interchangeable with *out* and sometimes with *down*. I claim that such interchangeability may also be accounted for by my proposal and constitutes a potentially interesting topic for future pursuit.

from a relatively more prominent role of the mental simulation by the subject of conception. Note that such mental simulation is especially important to abstract meanings, which involves rather scarce onstage conceptual content, and as a result would not be accounted for unless we take into account the subjective mental simulation inherent in all the senses. Therefore, subjective mental simulation is of paramount importance to the study of meaning, both because of its inherent role in all the senses and because it helps us make sense of abstract meanings.

The notion of conceptual archetype also deserves more attention in the study of meaning. As has been mentioned, the prototypical meaning in a semantic network is the archetypal concept most objectively construed, since this concrete meaning prompts the most onstage conceptual content and naturally fills the typical role of the object of conception in a viewing arrangement. In contrast, an attenuated conceptual archetype prompts less onstage conceptual content, which renders its status as an object of conception less typical. A conceptual archetype, if attenuated to the extreme, retains only a trace that is barely readily identifiable and resides only in the mental simulation of the subject of conception in processing the archetypal concept. Therefore, the present study supports Langacker's (1991, 1999, 2006, 2008) proposal that archetypal conception, the ability to identify recurrent patterns in fundamental experiences, be given due attention in the study of language.

The present study also accentuates the importance of schematization in language. As I showed, the highly abstract remnant of subjective processing is schematic, in the sense that it is imminent in and is elaborated by all instantiations. The process of attenuation leaves behind various instantiations; this means that the schematic conceptual archetype is realized with different levels of schematicity, or specificity if put the other way round. Therefore, attenuation can be understood not only as a process of subjectification but also as a process that lays bare the core schema. Such a mechanism of schematization, as Langacker (2008) states, appears not only in the domain of SPACE but also in other abstract conceptual domains, and is thus a domain-independent cognitive ability.

In addition to the above three cognitive abilities, the present study also attests a close relation between perception and conception, as has been argued extensively in Cognitive Linguistics, for the following two reasons. Firstly, as I have claimed, the mechanism of "self-projection" (Ikegami 2008) is involved in the extension from the prototypical meaning to 'approaching' for up and to 'forward' for *shàng*. For the construal of such extended senses, the conceptualizer projects himself onto the stage as a part of the conceptual scene, from which the object of conception is conceived. Moreover, as we have seen previously, the gradual attenuation of the onstage conceptual content results in an increasingly more prominent role of the conceptualizer in a construal. As the participation of the conceptualizer in a construal is greater, he behaves less as a typical subject of conception and more as an object of conception. I argue that this parallel relation between perception and conception in the above stage model (Langacker 1985, 1987, 1999, 2008) is embodied, in the sense that human anatomy confines us to being physically present at one place. The impossibility of being omnipresent limits our visual experience and understanding.

In sum, as is shown in the above discussion, the meaning of a symbol and the extensions at its semantic pole is contingent on the collaboration of the above cognitive factors: mental simulation; archetypal conception; schematization; and the parallel relation between perception and conception. The above connections between semantics and cognitive factors support the cognitive view of language as non-autonomous, intertwined with basic human cognitive abilities. In particular, conceptual archetypes play a pivotal role in lexical semantics, as a result of schema formation from recurring sensory-motor experiences. We can also see that there is a tight connection between perpetual experiences and conception, following Langacker's stage model. The above arguments of how lexical semantics interact with sensory-motor experiences are solid evidence against language being independent from other cognitive abilities in the human mind.

### 8.3 Limitations and further studies

The present study has, of course, some limitations. First of all, as I mentioned in my discussion on *shàng*, the positive pole of the vertical dimension in Mandarin occurs in a variety of constructional schemas, in addition to the [V] – [SHANG] schema. In my corpus, *shàng* also occurs in [SHANG] – [NP], as in *shàng-chē* 'SHANG-car', *shàng-cì* 'SHANG-time', *shàng-děng* 'SHANG-class', and so on, and it also occurs in the schema of [NP] – [SHANG], as in *chē-shàng* 'car-SHANG,' *shèhuì-shàng* 'society-SHANG', *shíjì-shàng* 'fact-SHANG', and so on. Only with a detailed exploration of *shàng* in all possible constructional schemas would we arrive at a comprehensive picture of how the positive pole of the vertical dimension is verbalized in Mandarin. Therefore, exploring the semantics of *shàng* in the above constructional schemas would be worth pursuing in further research.

Another limitation regarding the semantics of shàng is how the positive pole of the vertical dimension is instantiated in various abstract conceptual domains, such as quality, quantity, etc. For instance, Chinfa Lien (p.c.) pointed out that the metaphor of powerful is up in the social domain seems to abound in lexical expressions that involve shàng in Mandarin, whereas it is not so common for the English up. Therefore, a comparison and contrast between the respective repertoires of related abstract conceptual domains of up and shàng would also be worth further pursuit. The third limitation of the present study is seen in the various ways of verbalizing the vertical dimension in English. In English, the positive pole of the vertical dimension can be instantiated as *on*, *above*, *over*, or *up*, with each of these portraying a distinct tr-lm relation. However, the present study only analyzes *up*, due to its productivity in VPCs. Therefore, it would also be worthwhile to explore how near-equivalents of the spatial particles *on*, *above*, or *over* could be found in Mandarin.

A fourth possible topic for future study is an investigation into analogous constructions that involve spatial terms within a single language. As was mentioned by Lindner (1983), the particle up is interchangeable with *out* and *down* under some circumstances. An account based on attenuation and conceptual archetypes might be able to solve the mystery of why up, *out*, and *down*, which instantiate at least three different archetypal concepts, may all come to express a completive reading. A similar phenomenon can also be observed in Mandarin, where *shàng* seems to share an inceptive reading with the resultative  $k\bar{a}i$  (Wang and Su 2015) and *qĭlái* (Chang 1994; Huang and Chang 1996; Li 1999; Lu 2017a: 245–246). Looking further into why different spatial terms in one language can converge to express similar abstract meanings would shed further light on the role played by conceptual archetypes, attenuation and subjectification in the study of lexical semantics. I believe that the verb, as the autonomous predication relative to the suffixes, will be the key to the puzzle, and that a study on analogous constructions would have pedagogical value for second language learners.<sup>98</sup>

<sup>98</sup> Interested readers are referred to Lu (2015b) for an instance of how such cognitive semantic analysis of *shàng* may be applied to the second language teaching of Chinese.

### SUMMARY

Polysemy has received considerable attention in the study of language, and the body of research devoted to this issue has grown considerably since the 1980s. However, in the description of polysemy so far, little attention has been given to the role of context. The present study aims to narrow this gap by delineating the possible connections between the meaning in use of a lexical item and its context, by treating meaning as contextualized patterning of usage.

The present study adopts a two-fold definition of context. The first aspect is linguistic context, which will be strictly defined as the co-text of the target lexical item; and the second aspect is world knowledge, organized in the form of conceptual domains.

The target word of the present study is *up* in English, due to its productivity, semantic versatility and conceptual significance. However, so that we can formulate a more general claim on the making of lexical meaning, a near-equivalent, *shàng* in Mandarin, is also studied and compared to *up*.

In order to come to a more well-rounded understanding of polysemy, the present study asks the following research questions:

If meaning is to be construed as patterned sets of context, is there a connection between the patterning of context and the semantic clustering of a lexical item's usages? If so, what is the relation between the senses of up and its variety of contexts? In particular, how do the factors of co-text and conceptual domain come into play in the polysemy of up?

At first glance, some meanings of up are highly abstract and figurative, which suggests metaphor as the mechanism of semantic extension (e.g. Boers 1994; Lindstromberg 1997). Nevertheless, little attention has been given to how co-text can trigger the cross-domain conceptual mapping that is responsible for those figurative readings. To properly deal with this issue, I ask: What is the relationship between co-text, conceptual domain, and the metaphorical senses of up? Are all abstract meanings of up derived by cross-domain conceptual mapping?

Previous analyses on up (e.g. Boers 1994; Lindner 1983), besides investigating metaphor, also approach its usage from an image-schematic point of view. But these studies have not said much about the relationship between the co-text of up and the underlying image-schematic representation. Therefore, another concern of the present analysis will be: What is the connection between the co-text of up and the underlying imagistic representations?

In order to make a more generalizable claim on the interconnection between form, meaning and concept in language, I have chosen to analyze the Mandarin *shàng* as a counterpart of *up*. However, due to space limitations, I will focus on the relationship between the co-text of *shàng* and image schema. My key question is: In what way do the senses of *shàng* relate to its co-text and the image schematic structure? What can the similarities and differences between *shàng* and *up* tell us about the making of lexical meaning and the workings of semantic extension?

Conceptual metaphor and image-schema are two important factors that have received a good deal of attention in the study of polysemy of *up* and *shàng*. However, is there any other underexplored cognitive factor that is involved in understanding their polysemy?

To answer the above inquiries, I base the present research on the theoretical models of Cognitive Grammar (Langacker 1987, 1991, 2008) and Principled Polysemy (Evans 2004; Tyler and Evans 2001, 2003).

First, Cognitive Grammar (henceforth CG) is a theoretical model that can adequately explain the usage of spatial terms, in the sense that it takes a radical stance, from which language is viewed as grounded in basic human cognitive abilities. It is this particular belief that renders my choice reasonable, since I hope to figure out the mystery of lexical meaning by exploring the linguistic representation of space. Another rationale for this choice comes from Croft's (1993) application of semantic valence in CG to a discussion on metaphor. I suspect metaphor to be the mechanism of sense extension for some abstract meanings of up.

I adopt Principled Polysemy for its rigorous methodology in sense distinction and its capacity to accommodate the contextual element of co-text, based on Evans' (2004) Grammatical Criterion and Concept Elaboration Criterion. Principled Polysemy is chosen for its compatibility with CG, given their shared concern for the possible connection between language and space, and their commitment to the usage-based nature of language.

The data employed are mostly authentic and come from three sources. The English data are extracted from the British National Corpus and the Corpus of Contemporary America English. The Mandarin data are drawn from the Academia Sinica Balanced Corpus of Modern Chinese. The excerpts are examined in terms of the three criteria of sense distinction in Principled Polysemy.

Chapter 4 investigates the core senses of up that do not involve a cross-domain conceptual mapping, looking into the interaction between up's meaning, co-text and image-schematic representation. This chapter analyzes three semantic clusters – 'vertically higher,' 'approaching' and 'completive' – and presents the following findings.

By distinguishing between sub-schemas that belong to the same sense, I show that each sense should not be understood as a homogeneous lump but should be construed as a composite formed by different minor clusters of usage in the form of constructional schemas. An observation of authentic data also reveals that each sense does have its own pattern of co-text, and that distinguishing between minor clusters of usage within a sense helps us better capture the relation between the senses. I find that some cases of 'approaching' may invoke dual interpretations, which happens only within certain constructional schema, and that the re-categorization must take place in discourse, since the motivation behind the re-categorization is pragmatics-based. My findings here are in line with the basic tenet of CG, that language use is based on basic human cognitive abilities. This is because the different core meanings of up correlate with its imagistic structure, which reflects a basic operational mechanism in human perception. I observe that meaning is perspectival, since 'approaching' involves a non-default vantage point within the scope of predication, and this shift in point of view is another basic operating principle in human perception.

Chapter 5 discusses the metaphorical senses of up and the interplay between co-text and conceptual domain. In this chapter, four semantic clusters are addressed: 'more,' 'good,' 'happy' and 'accessible.' In this chapter, I present the following findings.

Firstly, the above meanings are extended from 'vertically higher' by means of domain mapping that occurs in the process of joining smaller symbolic assemblies into a larger complex one. The source of concept elaboration comes from an autonomous predication in the co-text of up. There are three possibilities for this source: the verb that combines with up; a noun phrase as an argument of the verb; or a noun phrase in the prepositional phrase that follows. My analysis furthermore demonstrates that the meaning of 'completive' and some of the metaphorical meanings are related in highly intricate ways. Such cross-cutting semantic connections illustrate that the mechanisms of image-schematic transformation and cross-domain mapping operate not in an exclusive manner but in conjunction. In many cases where a cross-domain mapping and the GOAL-prominent feature co-exist at the conceptual level, it is usually the metaphorical reading that wins out, with the 'completive' reading remaining immanent, unless somehow profiled (e.g. by a past participle).

Chapter 6 examines the core senses of *shàng* by looking at the relation between the senses, co-text and image schema. In this chapter, six semantic clusters are identified – 'vertically higher,' 'forward,' 'vertically attained,' 'attached,' 'completive' and 'inceptive' – with the following findings shown.

First of all, two clusters of meanings extend from the prototypical sense of 'vertically higher,' from which the sense of 'forward' is derived via the cognitive mechanism of self-projection. For the other cluster, from the prototypical sense comes the sense of 'vertically attained,' with the notion of SURFACE that characterizes it. Along this route of semantic change, the conceptual substrate of SURFACE is gradually attenuated, leaving behind a semantic gradation formed by the other senses. Moreover, I find that the concept elaboration of a sense for *shàng* is close-ly associated with the image-schematic structure prompted by the constructional schema, which also illustrates the close relation between meaning and perception. The cluster of 'forward' similarly involves an onstage vantage point, which also attests to the perspectival grounding of meaning. Furthermore, the semantic extension from 'completive' to 'inceptive' involves different allocation of attention to the sub-parts of the same conceptual scene, and this can give rise to different construals of an identical conceptual content. This focal adjustment is a key operating principle not only in human perception but also in lexical semantics.

Chapter 7 is a discussion on the findings in the previous chapters. First of all, I note that the respective arrays of senses for up and shàng each constitute a clear case of semantic attenuation, where the onstage conceptual content gradually diminishes. The array of the core senses in the semantic networks of both up and shàng meets Langacker's (1999) four parameters of attenuation: a shift in status, in focus, in domain and in the locus of potency. In addition to semantic attenuation, the semantic networks of up and of shàng involve different repertoires of onstage conceptual contents, with up prompting VERTICAL ELEVATION and shàng both VERTICAL ELEVATION and REST ON A SURFACE. In the process of semantic attenuation, the fading away of the conceptual substrate leaves behind various related senses, each being a result of the reduced archetypal concepts. The other side of semantic attenuation is subjectification (Langacker 1999, 2006), since as the onstage conceptual content gradually fades away, the conceptual archetype's role in the construal becomes less prominent, which leads to a less objective, or more subjective if put another way, construal of the conceptual substrate. I claim that the mental simulation of the subject of conception is equally essential in understanding the meaning of a lexical item, in the sense that the subjective processing is imminent in all usages, with its role remaining implicit until the lexical meaning has undergone a high degree of attenuation.

With the above findings, the present study makes the following contributions: In the first place, I have delineated the interconnection of the polysemy of *up* and *shàng* with their co-text and the associated image-schematic structures. Secondly, I have clarified the interplay of co-text and conceptual domain, and how these two factors relate to the metaphorical senses of up. More importantly, I have argued that attenuation and subjectification are important factors in the study of lexical semantics, alongside metaphor and image schema.

The implications of the present study are two-fold. For one, the findings and discussions show that basic cognitive abilities, such as perception and archetypal conception, are critical factors in studying the semantics of spatial terms. Furthermore, subjectification and attenuation work on archetypal concepts to produce an array of interrelated senses, with highly abstract meanings being a consequence of extreme attenuation. I thus propose that an investigation into the highly abstract meanings of a lexical item will have much to do with its associated conceptual archetypes and the path of semantic attenuation.

### 内容簡述

多義詞的認知語意研究: 以 [V] - [UP] 和 [V] - [SHÀNG] 為例

自從1980年代起,多義詞的研究在認知語言學領域一直是經典的重要議題。然而,在多義詞研究裡,語境的因素通常都沒有受到應有的注意。有鑑於此,本研 究希望找出詞彙語意和語境的確切關係,以期對多義詞的認知語意研究做出更多 貢獻。

本研究對「語境」此一概念,採取兩種定義,包括上下文(也就是多義詞的前 後共現詞),以及語言使用者對世界的的知識(也就是概念範疇)。

本研究的主要目標多義詞是英文的 up ,其選擇是基於該詞的高詞頻、語意多 變性以及概念上的重要性(為垂直空間的正向維度)。此外,為了從事跨語言的 多義詞語意比較研究,我選擇了中文的「上」一詞來做對比。

為了更清楚地從認知角度來分析多義詞,本研究探討以下研究問題:

如果意義和不同種類的語境相關,那麼語境的出現模式,和詞彙意義關係有無 相關?如果有,英文的 up 一詞,和其語境的確切關係為何?更精確地說,up 的 語境中的上下文和概念範疇,如何影響 up 的語意?

乍看之下, up 的某些語意非常模糊抽象,因此如前人研究所結論,我們可以 接受隱喻是一個重要的語意延伸機制(如Boers 1994; Lindstromberg 1997)。 然而,之前的研究並未注重目標詞的上下文是否可能造成跨範疇的隱喻映照,進 而產生目標詞的多義。因此,我特別要探究:目標詞的上下文、概念範疇、和 up 的隱喻義之間,有什麼關係? Up 的所有抽象意義,都是以隱喻的方式延伸出來 的嗎?

除了隱喻,前人對於的研究也曾從影像基模的觀點探究(如Boers 1994; Lindner 1983)。但是,這些研究並未探討目標詞上下文是否和概念層次上的影像基模有關。因此,本研究的另一重點是:up的上下文,和影像基模的表徵是否有關?

為了更瞭解形式、意義和概念在語言中的角色,我選擇了中文的「上」來與英

文的 up 對比。然而,由於篇幅的限制,我僅能集中探討「上」的前後文和影像 基模之間的關係。我所特別探討的問題是: 「上」的各項語意和其前後文的關係 究竟為何? 「上」和 up 之間的相似性和相異性,能否在詞彙語意和語意延伸方 面,給我們任何啟示?

概念隱喻和影像基模是影響up和「上」語意兩個重要的因素。然而,除此之 外,是否還有其他影響這兩個詞彙語意的認知因素?

為了回答上述的五個問題,本研究採取認知語法(Langacker 1987, 1991, 2008) 和規則性多義(Evans 2004; Tyler and Evans 2001, 2003)做為研究框架。

首先,認知語法是能夠恰當解釋空間詞使用的理論模型,因為該理論認為,語 言乃奠基於人類的基礎認知能力。此外,另一個選擇認知語法的優點是該理論中 所提及的語意價 (semantic valence),此概念已經過證明,是可以應用在隱喻 研究的 (參見Croft 1993),而如前所述,隱喻恰好就是 up 的抽象語意能夠衍生 出來的機制。

方法學上,我採用規則性多義,因為該理論框架對於詞彙語意的定義是足夠嚴 謹的,並且也能夠以語法標準和概念標準(Grammatical Criterion and Concept Elaboration Criterion,參見Evans 2004)來處理前後文這項因素。規則性多義 和認知語法是相容的,由於兩個理論框架都注重語言和空間之間的關係,並且兩 者都認為語言使用是語言理論的最重要基礎。

本研究所使用的語料,有三個來源。英文的語料是由英國國家語料庫和當代美國英語語料庫擷取;中文的語料是由中央研究院的現代漢語平衡語料庫擷取。所 擷取的語料,我都使用了規則性多義框架中的方法來定義義項。

第四章研究 up 未涉及隱喻延伸的義項,主要探討 up 的詞彙意義、前後文 和影像基模之間的關係。本章分析三個 up 的義項:「在垂直維度較高」、「接 近」、以及「完成」。

藉由分析每個義項裡的次構式,我說明了每個義項不應該被視為是單純的整 體,而應視為是由數個次構式所整合起來的。看了真實語料後,我認為每個義項 都有各自的前後文,並且如果仔細分析構式,我們便可以看出各個義項之間的細 部關係。我發現「接近」義項中的某些例子,可以有雙重意義,但這只在某些 次構式中;並且,雙重語意的重新分析,必須在真實語境中才會產生,因為產生 雙重語意的動因,是語用方面的。我在此處的發現和認知語法的根本信念是雷同 的:也就是語言的意義乃基於人類的種種基本認知能力。本章的結果,完全呼應 認知語法的基礎,因為 up 不同的義項,的確具有不同的影像基模。我發現,詞 彙的意義是和視角 (perspective) 有關的,因為 up 的「接近」義和一般的語 意不同,牽涉到投射到舞台上的觀察者;這樣的認知換位能力,與人類視知覺的 認知能力高度相關。

第五章討論 up 的隱喻義,以及前後文與概念範疇的關係。在本章中,我討論 了四個義項:分別為「多」、「佳」、「快樂」、以及「可察知」。

首先,以上的意義都是由「垂直維度較高」,基於跨範疇映照而延伸出的。跨 範疇映照,是在小構式組成大構式時產生。語意轉移到新概念範疇,是因為在 up 前後文中的自主概念的介入。在語意產生的過程中,有三個可能的自主概念: 第一,與 up 共現的動詞;第二,該動詞的論元名詞;第三,前後文中介系詞片 語裡的名詞。我的分析進一步顯示了「完成」義項與一些隱喻義具有細緻且難以 切分的關連。錯綜複雜的語意關係說明了影像基模和隱喻並非兩個互斥的認知動 因,而是可能一同作用的。在許多有跨範疇映照和終點突出(GAL-prominent)影 像基模的語例裡,通常隱喻義的解讀會勝出,使得「完成」義較為隱蔽,除非有 其他的因素使「完成」義顯明出來(例如使用了英語的過去分詞)。

第六章分析了「上」的核心義項與前後文、影像基模之間的關係。在本章裡, 我討論了六個和隱喻無關的義項:「垂直維度較高」、「往前」、「垂直維度達 到」、「附著」、「完成」、以及「開始」。

首先,根據規則性多義理論的原則,我判定「垂直維度較高」是原型語意。而 基於自我投射的認知機制,「垂直維度較高」可以衍生出「往前」義項。此外, 「垂直維度較高」還可以衍生出「垂直維度到達」義項,此義項帶有「表面」的 概念特徵。在同一條語意延伸的路徑上,「表面」這個概念特徵會逐漸弱化,留 下不同語意強度的幾個義項。第二,我發現「上」的義項和影像基模和構式基模 有關,此證明了認知語言學的基本假設,即意義和知覺的相關性。「往前」這個 義項和 up 的「接近」義項類似,牽涉到認知層面舞台上的觀察者,同時也證明 了視角在詞彙語意分析的重要性。再者,從「完成」義延伸到「開始」義的過程 中,牽涉到該舞台上觀察者注意力的分布;不同的注意力分布,可造成我們對同 一概念產生不同的理解。此證明了,焦點調整不僅在人類的知覺,同時在詞彙語 意方面,都是重要的原則。

第七章是針對前面幾章發現做出的討論。首先,我提出 up 和「上」兩個多義詞的種種義項彼此之間,存有語意弱化的關係;在該過程中,在認知舞台上的概念內容逐漸地消失。對於 up 和「上」,語意弱化的過程符合 Langacker (1999)所提出的四個判準:語意地位的改變、焦點改變、範疇改變、以及能動性改變。除了語意弱化這個因素以外,up和「上」各自的語意網路也具備了不同的概念內容; up 僅具有「垂直上升」,而「上」一詞則具有「垂直上升」和「在表面停留」兩個概念內容。在語意弱化的過程中,概念內容的逐漸消失留下了相關連的幾個義項,每個義項都是上述兩個概念原型的弱化版本。同時,與語意弱化一體兩面的是主觀化(subjectification),因為在認知舞台上的概念內容逐漸弱化的同時,概念原型在認知裡所扮演的角色逐漸轉為隱蔽,造成認知主體對於概念內容的客觀性理解降低(亦即對概念內容的理解主觀性程度提高)。我認為,認知主體在心理層面的模擬,對於詞彙意義的理解甚為重要,因為主體的心靈處理過程(subjective processing)無論如何,總是存在於對詞彙的理解過程中,隱而未顯,直到詞彙語意弱化到相當的程度才顯明出來。

基於以上的發現與討論,本研究做出以下的貢獻:首先,本研究釐清了up和「 上」兩個多義詞的義項、前後文與影像基模之間的關係。第二,本研究也深入探 討了前後文與概念範疇之間的關係,以及這兩個因素和up的隱喻義之間的關係。 更重要的是,本研究證明了語意弱化和主觀化乃是除了隱喻和影像基模以外,分 析詞彙語意的重要認知因素。 本研究的理論蘊涵有二:第一,在研究空間詞時,人類的基本認知能力如視知 覺和原型概念是相當重要的。此外,主觀化和語意弱化會對原型概念造成影響, 進而產生幾個相關連的義項;高度抽象的義項,就是語意極端弱化的結果。因 此,我認為未來對高度抽象的詞彙語意研究,需要考慮原型概念在語意延伸的過 程中所扮演的角色。

## BIBLIOGRAPHY

- Atkins, S. (1993). Tools for computer-aided lexicography: The Hector Project. Acta Linguistica Hugarica 41, 5–72.
- Barcelona, A. (2000). On the plausibility of claiming a metonymic motivation for conceptual metaphor. In A. Barcelona (Ed.), *Metaphor and metonymy at the crossroads: A cognitive perspective* (pp. 31-58). Berlin; New York: Mouton de Gruyter. https://doi. org/10.1515/9783110894677.31
- Benveniste, E. (1971). Subjectivity in language. In M. E. Meek (Ed.), Problems in general linguistics (pp. 223–230). Coral Gables, FL: University of Miami Press.
- Boers, F. (1994). Motivating meaning extensions beyond physical space: A cognitive linguistic journey along the up-down and the front-back dimension. Ph.D. dissertation, Antwerp University.
- Bolinger, D. (1971). The phrasal verbs in English. Cambridge, MA: Harvard University Press.
- Breal, M. (1964). Semantics: Studies in the science of meaning (trans. Henry Cust). New York: Dover. [Original edition 1900]
- Brugman, C. (1988). The story of over: Polysemy, semantics, and the structure of the lexicon. New York: Garland Press.
- Buhler, K. (1990). Theory of language: The representational function of language (trans. D. F. Goodwin). Amsterdam: Benjamins. [Original edition 1934] https://doi.org/10.1075/ fos.25
- Cappelle, B. (2005). *Particle patterns in English: A comprehensive coverage*. Ph.D. Dissertation, University of Leuven.
- Chang, S. (1994). V-qilai construction in Mandarin Chinese: A study for their semantics and syntax. M.A. thesis, National Tsinghua University.
- Chen, M, & J. Chang. (2010). The meaning extension of *xiang* and its polysemy network. *Taiwan Journal of Linguistics* 8(2), 1–32.

- Chou, T. (1999). A study of polysemous words *shang* and *xia* in Chinese. M.A. Thesis, National Tsinghua University.
- Croft, W. (1990). Possible verbs and the structure of events. In S. L. Tsohatzidis (Ed.), *Meanings and prototypes: Studies in linguistic categorization* (pp. 48–73). London: Routledge.
- Croft, W. (1993). The role of domains in the interpretation of metaphors and metonymies. *Cognitive Linguistics* 4(4), 335-70. https://doi.org/10.1515/cogl.1993.4.4.335
- Croft, W. (2001). Radical Construction Grammar: Syntactic theory in typological perspective. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198299554.001.0001
- Croft, W. & D. A. Cruse. (2004). Cognitive linguistics. Cambridge; New York: Cambridge University Press. https://doi.org/10.1017/CBO9780511803864
- Cruse, D. A. (1986). Lexical semantics. Cambridge: Cambridge University Press.
- Cruse, D. A. (2000). *Meaning in language: An introduction to semantics and pragmatics*. Oxford; New York: Oxford University Press.
- Dehe, N. (2002). Particle verbs in English: Syntax, information structure, and intonation. Amsterdam; Philadelphia: John Benjamins. https://doi.org/10.1075/la.59
- Dewell, R. B. (1994). Over again: Image-schema transformations in semantic analysis. Cognitive Linguistics 5(4), 351–80. https://doi.org/10.1515/cogl.1994.5.4.351
- Dosedlová, A. & W. Lu. (2019). The Near-synonymy of classifiers and construal operation: A corpus-based study of 棵 kē and 株 zhū in Mandarin Chinese. *Review of Cognitive Linguistics* 17(1), 116–133. https://doi.org/10.1075/rcl.00028.dos
- Dosedlová, A. & W. Lu. (2021). A co-varying collexeme analysis of Chinese classifiers 棵 kē and 株 zhū. In B. Basciano, F. Gatti & A. Morbiato (Eds.), *Corpus-based research on Chinese language and linguistics*, 223–238. Venice: Edizioni Ca' Foscari.
- Evans, V. (2004). The structure of time: Language, meaning and temporal cognition. Amsterdam; Philadelphia: John Benjamins. https://doi.org/10.1075/hcp.12
- Evans, V. (2006). Lexical concepts, cognitive models and meaning construction. *Cognitive Linguistics* 17(4), 491–534. https://doi.org/10.1515/COG.2006.016
- Fauconnier, G. & M. Turner. (2002). The way we think: Conceptual blending and the mind's hidden complexities. New York: Basic Books.
- Fillmore, C. (1976). Frame semantics and the nature of language. Annuals of the New York Academy of Sciences 280(1), 20–32. https://doi.org/10.1111/j.1749-6632.1976.tb25467.x
- Fillmore, C. J. & B. T. S. Atkins. (1992). Toward a frame-based lexicon: The semantics of RISK and its neighbors. In A. Lehrer & E. Kittay (Eds.), *Frames, fields, and contrasts* (pp. 75–102). Hillsdale, NJ: Erlbaum.
- Fillmore, C. J. & B. T. S. Atkins. (2000). Describing polysemy: The case of crawl. In Y. Ravin & C. Leacock (Eds.), *Polysemy: Theoretical and computational approaches* (pp. 91–110). Oxford: Oxford University Press.
- Fillmore, C., P. Kay & M. K. O'Connor. (1988). Regularity and idiomaticity in grammatical constructions: The case of *let alone*. *Language* 64(3), 501–38. https://doi. org/10.2307/414531

Firth, J. R. (1957). Modes of meaning. Oxford: Oxford University Press.

- Geeraerts, D. (1993). Vagueness's puzzles, polysemy's vagaries. *Cognitive Linguistics* 4(3), 223–72. https://doi.org/10.1515/cogl.1993.4.3.223
- Goldberg, A. E. (1995). Constructions: A construction grammar approach to argument structure. Chicago: Chicago University Press.
- Grady, J. (1997). Primary metaphors and primary scenes. Ph.D. dissertation, UC Berkeley.
- Grice, P. (1978). Further notes on logic and conversation. In P. Cole & J. Morgan (Eds.), *Syntax and semantics, Vol. 9, Pragmatics* (pp. 113-128). New York: Academic Press. https://doi.org/10.1163/9789004368873\_006
- Gries, S. Th. (2006). Corpus-based methods and cognitive semantics: The many meanings of to run. In S. Th. Gries & A. Stefanowitsch (Eds.), Corpora in cognitive linguistics: Corpus-based approaches to syntax and lexis (pp. 57–99). Berlin; New York: Mouton de Gruyter. https://doi.org/10.1515/9783110197709
- Hampe, B. (2005). When down is not bad, and up not good enough: A usage-based assessment of the plus-minus parameter in image-schema theory. Cognitive Linguistics 16(1), 81–112. https://doi.org/10.1515/cogl.2005.16.1.81
- Hanks, P. (1996). Contextual dependency and lexical sets. International Journal of Corpus Linguistics 1(1), 75–98. https://doi.org/10.1075/ijcl.1.1.06han
- Herskovits, A. (1986). Language and spatial cognition: An interdisciplinary study of the prepositions in English. Cambridge: Cambridge University Press.
- Herskovits, A. (1988). Spatial expressions and the plasticity of meaning. In B. Rudzka-Ostyn (Ed.), *Topics in Cognitive Grammar* (pp. 271–98). Amsterdam; Philadelphia: John Benjamins. https://doi.org/10.1075/cilt.50.11her
- Hsu, Y. (2001). An analysis of the Chinese spatial term shang in three reference frames. M.A. Thesis, National Chung Cheng University.
- Huang, C. & S. Chang. (1996). Metaphor, metaphorical extension, and grammaticalization: A study of Mandarin Chinese -qilai. In A. Goldberg (Ed.), Conceptual structure, discourse, and language (pp. 201–215). Stanford: CSLI.
- Ikegami, Y. (1987). 'Source' vs. 'goal': A case of linguistic dissymmetry. In R. Dirven & G. Radden (Eds.), *Concepts of case* (pp. 122–46). Tübingen: Gunter Narr Verlag Tübingen.
- Ikegami, Y. (2008). Subjective construal as a 'fashion of speaking' in Japanese. In M. A. G. Gonzalez, J. L. Mackenzie & E. M. G. Álvarez. (Eds.), *Current trends in contrastive linguis-tics: Functional and cognitive perspectives* (pp. 227–250). Amsterdam; Philadelphia: John Benjamins. https://doi.org/10.1075/sfsl.60.14ike
- Jackendoff, R. (1983). Semantics and cognition. Cambridge, Mass.: MIT Press.
- Jackendoff, R. (1990). Semantic structures. Cambridge, Mass.: MIT Press.
- Jakobson, R. (1957). Shifters, verbal categories, and the Russian verb. Cambridge, Mass: Harvard University Press.
- Johnson, M. (1987). The body in the mind: The bodily basis of meaning, imagination and reason. Chicago: Chicago University Press. https://doi.org/10.7208/chicago/9780226177847.001.0001

- Kilgarriff, A. (1997). I don't believe in word senses. Computers in the Humanities 31, 91–113. https://doi.org/10.1023/A:1000583911091
- Kim, H. (2005). Semantic networks of shang and xia in Mandarin Chinese: A cognitive linguistic analysis. M.A. Thesis, Providence University.
- Kövecses, Z. (1991). Happiness: A definitional effort. *Metaphor and Symbolic Activity* 6(1), 29–46. https://doi.org/10.1207/s15327868ms0601\_2
- Lakoff, G. (1987). Women, fire, and dangerous things: What categories reveal about the mind. Chicago: Chicago University Press. https://doi.org/10.7208/chicago/9780226471013.001.0001
- Lakoff, G. & M. Johnson. (1980). Metaphors we live by. Chicago: Chicago University Press.
- Langacker, R. W. (1982). Space Grammar, analyzability, and the English passive. Language 58(1), 22–80. https://doi.org/10.2307/413531
- Langacker, R. W. (1985). Observations and speculations on subjectivity. In J. Haiman (Ed.), *Iconicity in syntax* (pp. 109–50). Amsterdam; Philadelphia: John Benjamins. https://doi. org/10.1075/tsl.6.07lan
- Langacker, R. W. (1987). *Foundations of Cognitive Grammar*. Stanford: Stanford University Press.
- Langacker, R. W. (1990). Subjectification. *Cognitive Linguistics* 1(1), 5–38. https://doi.org/10.1515/cogl.1990.1.1.5
- Langacker, R. W. (1991). Concept, image and symbol. Stanford: Stanford University Press.
- Langacker, R. W. (1999). Grammar and conceptualization. Berlin; New York: Mouton de Gruyter. https://doi.org/10.1515/9783110800524
- Langacker, R. W. (2000). A dynamic usage-based model. In M. Barlow & S. Kemmer (Eds.), *Usage-based models of language* (pp. 1–64). Stanford, CA: CSLI Publications.
- Langacker, R. W. (2006). Subjectification, grammaticalization, and conceptual archetypes. In A. Athanasiadou, C. Canakis & B. Cornillie (Eds.), *Subjectification: Various paths to subjectivity* (pp. 17–40). Berlin; New York: Mouton de Gruyter.
- Langacker, R. W. (2008). Cognitive Grammar: A basic introduction. Berlin; New York: Mouton de Gruyter. https://doi.org/10.1093/acprof:oso/9780195331967.001.0001
- Levinson, S. C. (2000). Presumptive meanings: The theory of generalized conversational implicature. Cambridge, Mass.: MIT Press. https://doi.org/10.7551/mitpress/5526.001.0001
- Li, M. (1999). A semantic study of modern Chinese localizer shang. M.A. Thesis, National Taiwan Normal University.
- Li, A. C. (1999). On Mandarin directional verbs qilai, xiaqu, and shanglai: A reflection of grammaticalization. M.A. Thesis, National Chengchi University.
- Liang, H. & K. Sullivan. (2019). Chinese L2 acquisition of sense relatedness for shàng "to go up". Chinese as a Second Language Research, 8(1), 1–28. https://doi.org/10.1515/ caslar-2019-0001
- Lindner, S. (1982). What goes up doesn't necessarily come down: The ins and outs of opposites. In *Papers from the 18th regional meeting, Chicago Linguistic Society* (pp. 305–23). Chicago: University of Chicago Press.

- Lindner, S. (1983). A lexico-semantic analysis of English verb particle constructions with out and up. Bloomington: University of Indiana Linguistics Club.
- Lindstromberg, S. (1997). English prepositions explained. Amsterdam; Philadelphia: John Benjamins. https://doi.org/10.1515/caslar-2019-0001
- Lloyd, S. E., Sinha C. G. & N. H. Freeman. (1981). Spatial reference systems, and the canonicality effect in infant search. *Journal of Experimental Child Psychology*, 32(1), 1–10. https://doi.org/10.1016/0022-0965(81)90088-6
- Lu, L. W. & L. I. Su. (2012). Antonymous polysemy: The case of *-shang* in Mandarin. In A. Bednarek (Ed.), *Interdisciplinary perspectives in cross-cultural communication* (pp. 36–50). München: Lincom Europa Academic Publishers.
- Lu, W. (2015a). Image-schemas, domains, co-text and the semantics of resultatives: A cognitive linguistic approach to *-shang*. *Chinese Language and Discourse* 6(2), 162–182. https://doi.org/10.1075/cld.6.2.03lu
- Lu, W. (2015b). A Cognitive Linguistic approach to teaching spatial particles: From contrastive constructional analyses to material design. In K. Masuda, C. Arnett & A. Labarca (Eds.), *Cognitive linguistics and sociocultural theory* (pp. 51–72). Berlin: de Gruyter. https://doi.org/10.1515/9781614514442-005
- Lu, W. (2016). Polysemy and the semantic-pragmatic interface: The case of *up* in a context-based model. *Intercultural Pragmatics* 13(4), 563–589. https://doi.org/10.1515/ip-2016-0024
- Lu, W. (2017a). Metaphor, conceptual archetypes and subjectification: The case of COM-PLETION IS UP and the polysemy of *shàng* in Chinese. In A. Athanasiadou (Ed.), *Studies in figurative thought and language* (pp. 231–249). Amsterdam; Philadelphia: John Benjamins. https://doi.org/10.1075/hcp.56.09lu
- Lu, W. (2017b). Perspectivization and contextualization in semantic analysis: A parsimonious polysemy approach to *in. Studia Linguistica Universitatis Iagellonicae Cracoviensis* 134, 247–264. https://doi.org/10.4467/20834624SL.17.017.7091
- Lu, W. (2020). Viewpoint and subjective construal across languages: English inversion, associated strategies and their Chinese renditions in multiple parallel texts. *Cognitive Linguistic Studies* 7(2), 333–355. https://doi.org/10.1075/cogls.00060.lu
- Lu, W., N. Kudrnáčová and L. A. Janda (Eds.). (2021). Corpus approaches to language, thought and communication [Benjamins Current Topics 119]. Amsterdam; Philadelphia: John Benjamins. https://doi.org/10.1075/bct.119
- Lyons, J. (1982). Deixis and subjectivity. In R. J. Jarvella & W. Kleins (Eds.), Speech, place and action: Studies in deixis and related topics (pp. 101-24). Chichester; New York: John Willey.
- Mandler, J. (1988). How to build a baby: On the development of an accessible representational system. *Cognitive Development* 3(2), 113–136. https://doi.org/10.1016/0885-2014(88)90015-9
- Mandler, J. (1992). How to build a baby II: Conceptual primitives. *Psychological Review* 99(4), 587–604. https://doi.org/10.1037/0033-295X.99.4.587

- Pustejovsky, J. (1991). The generative lexicon: A theory of computational lexical semantics. Cambridge, Mass.: MIT Press.
- Radden, G. (2000). How metonymic are metaphors. In A. Barcelona (Ed.), *Metaphor and metonymy at the crossroads: A cognitive perspective* (pp. 93–108). Berlin; New York: Mouton de Gruyter. https://doi.org/10.1515/9783110894677.93

Rhee, S. (2000). Frame of focus in grammaticalization. Discourse and Cognition 7, 79-104.

- Rudzka-Ostyn, B. (2003). Word power: Phrasal verbs and compounds. Berlin; New York: Mouton de Gruyter. https://doi.org/10.1515/9783110197235
- Ruhl, C. (1989). On monosemy: A study in linguistic semantics. Albany, NY: State University of New York Press.
- Ruhl, C. (2002). Data, comprehensiveness, monosemy. In W. Reid, R. Otheguy & N. Stern (Eds.), Signal, meaning and message (pp. 171–89). Amsterdam; Philadelphia: John Benjamins. https://doi.org/10.1075/sfsl.48.11ruh
- Sinclair, J. (2004). Trust the text: Language, corpus and discourse. London: Routledge. https:// doi.org/10.4324/9780203594070
- Soon, S. & S. Chung. (2016). Locative particle 'shang' in Chinese. In F. A. Almeida, I. O. Barrera, E. Q. Toledo and M. S. Cuervo (Eds.), *Input a word, analyse the world: Selected approaches to corpus linguistics* (pp.171–182). Newcastle upon Tyne: Cambridge Scholars Publishing.
- Smith, C. S. (1997). The parameter of aspect. Dordrecht: Kluwer Academic Publishers. https://doi.org/10.1007/978-94-011-5606-6
- Sperber, D. & D. Wilson. (1986). Relevance: Communication and cognition. Oxford: Blackwell.
- Stefanowitsch, A. (2003). Constructional semantics as a limit to grammatical alternation: The two genitives of English. In G. Rohdenburg & B. Mohndorf (Eds.), *Determinants of grammatical variation in English* (pp. 413-444). Berlin; New York: Mouton de Gryuter. https://doi.org/10.1515/9783110900019.413
- Stefanowitsch, A. & A. Rohde. (2004). The goal bias in the encoding of motion events. In K. Panther & G. Radden (Eds.), *Motivation in grammar* (pp. 249–68). Berlin; New York: Mouton de Gryuter.
- Stefanowitsch, A. & S. Th. Gries. (2005). Covarying collexemes. Corpus Linguistics and Linguistic Theory 1(1), 1–43. https://doi.org/10.1515/cllt.2005.1.1.1
- Su, C. (1997). The semantic versatility of Mandarin morphemes shang and xia: A cognitive linguistic analysis. M.A. Thesis, Providence University.
- Su, L. I. (1998). Metaphor, metonymy, and lexical meaning. National Taiwan University Working Papers in Linguistics 1, 49–73.
- Talmy, L. (1985). Force Dynamics as a generalization over causative. In *Georgetown University Round Table on languages and linguistics* (pp. 67–85). Washington: Georgetown University Press.

- Talmy, L. (1996). Fictive motion in language and 'ception'. In P. Bloom & M. Peterson (Eds.), *Language and space* (pp. 211-76). Cambridge, Mass.: MIT Press.
- Taylor, J. (2003a). Polysemy's paradoxes. *Language Sciences* 25(6), 637–655. https://doi. org/10.1016/S0388-0001(03)00031-7
- Taylor, J. (2003b). Category extension by metonymy and metaphor. In R. Dirven and R. Pörings (Eds.), *Metaphor and metonymy in comparison and contrast* (pp. 323–48). Berlin; New York: Mouton de Gryuter.
- Traugott, E. C. (1989). On the rise of epistemic meanings in English: An example of subjectification in semantic change. *Language* 65(1), 31–55. https://doi.org/10.2307/414841
- Traugott, E. C. (1995). Subjectification in grammaticalisation. In D. Stein and S. Wright (Eds.), Subjectivity and subjectivisation in language (pp. 31–54). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511554469.003
- Traugott, E. C. (2003). From subjectification to intersubjectification. In R. Hickey (Ed.), *Motives for language change* (pp. 124–39). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511486937.009
- Tyler, A., & V. Evans. (2001). Reconsidering prepositional polysemy networks: The case of over. Language 77(4), 724–65. https://doi.org/10.1353/lan.2001.0250
- Tyler, A., & V. Evans. (2003). The semantics of English prepositions: Spatial scenes, embodied meaning and cognition. Cambridge; New York: Cambridge University Press. https://doi. org/10.1017/CBO9780511486517
- Vandeloise, C. (1991). Spatial prepositions: A case study in French. Chicago: University of Chicago Press.
- Vandeloise, C. (1994). Methodology and analyses of the preposition in. Cognitive Linguistics 5(2), 157–184. https://doi.org/10.1515/cogl.1994.5.2.157
- Vendler, Z. (1957). Verbs and times. The Philosophical Review 66(2), 143–160. https://doi. org/10.2307/2182371
- Verhagen, A. (2012). Construal and stylistics within a language, across contexts, across languages. In *Stylistics across disciplines* (Conference CD-ROM Proceedings). Leiden.
- Wang, B. P.-Y., & L. I. Su (2015). On the principled polysemy of *-kai* in Chinese resultative verbs. *Chinese Language and Discourse* 6(1), 2–27. https://doi.org/10.1075/cld.6.1.01wan
- Wilson, D. (2003). Relevance theory and lexical pragmatics. *Italian Journal of Linguistics/ Rivista di Linguistica* 15, 273–291.
- Xiao, R. & T. McEnery. (2004). Aspect in Mandarin Chinese: A corpus-based study. Amsterdam; Philadelphia: John Benjamins. https://doi.org/10.1075/slcs.73

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### List of Abbreviations

ADV: adverbializer CL: classifier CRS: current relevance state DIM: diminutive DSPL: disposal marker LK: linker LOC: locative marker PASS: passive marker PFV: perfective aspect PL: plural marker PRT: particle RED: reduplication TNTV: tentative aspect

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### A Conceptual Exploration of Polysemy:

A Case Study of [V] – [UP] and [V] – [SHÀNG]

Wei-lun Lu (呂維倫 博士)

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