

# 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.

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1 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.

2 Throughout this study, the word “meaning” refers to the relation between the various functions coupled with a linguistic form in a broad sense.

3 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?

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4 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)	<i>dàihùi</i>	<i>wǒ</i>	<i>pá-shàng</i>	<i>wū-ding</i>	<i>qù</i>
	later	I	climb-SHANG	house-top	go
	<i>chǎn-yì-chǎn</i>		<i>xuě</i>		
	shovel-TNTV-RED		snow		

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

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

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)	<i>tàiyang!</i>	<i>kàn</i>	<i>wǒ</i>	<i>lái</i>	<i>zhuī-shàng</i>
	sun	look	I	come	chase-SHANG
	<i>nǐ,</i>		<i>shèng-guò</i>	<i>nǐ!</i>	
	you		win-PFV	you	

“Sun! I am here to catch you up and to conquer you!”

(1-9)	<i>yèzhě</i>	<i>jiāng</i>	<i>tiēmén</i>	<i>guān-shàng</i>
	owner	DSPL	gate	close-SHANG
	<i>jìxù</i>		<i>yíngyè</i>	
	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 *zhuī-shàng* ‘chase-SHANG’ in (1-8) can be translated into English as *catch up*. It is interesting to note that neither *zhuī-shàng* nor *catch up* portrays a vertical motion in a strict sense. In a similar vein, *guān-shàng* ‘close-SHANG’ in (1-9) can be translated into the verb-particle construction of *close up* in English. As with *zhuī-shàng* and *catch up*, no vertical sense can be found in *guān-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 *shàng*

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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