

# 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

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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-1m 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

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13 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 *shàng* count as constructions as well.

14 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.

15 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.

16 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.