The Progress of My Ph.D. Study

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The greatest thing by far is to be a master of metaphor. It is the one thing that cannot be learned from others; it is also a sign of genius, since a good metaphor implies an eye for resemblance.

— Aristotle, *De Poetica*, 322B.C.
A Comparative Study of Spatial Metaphors between Chinese and Western Academic Writing from the perspective of conceptual metaphor theory

---- Prepositions “in” “on” and “at” as examples
Outline

1. Introduction
2. Literature Review
3. Methodology
4. Image Schemata of Preposition “in” “on” and “at”
5. Results
6. Discussion and Analysis
7. Conclusion
## 1. Introduction

### 1.1 Research Background

<table>
<thead>
<tr>
<th>Cognitive Linguistics</th>
<th>introspection approach (Langacker, Lakoff, Talmy)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>corpus-based approach (Gries &amp; Stefanowitsch, 2006)</td>
</tr>
<tr>
<td></td>
<td>multimodal approach (McNeill, 2005; Kita, 2007)</td>
</tr>
<tr>
<td></td>
<td>behavioral approach (Deane, 1992; Sandra &amp; Rice, 1995)</td>
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<tr>
<td></td>
<td>neurocognitive approach (Caplan, 1987; Feldman, 2006)</td>
</tr>
</tbody>
</table>

| Corpus Linguistics     | “We have noted that comprehensive studies of use cannot rely on intuition, anecdotal evidence, or small samples; they rather require empirical analysis of large databases of authentic texts, as in the corpus-based approach.” (Biber, Conrad & Reppen, 2000: 9) |

| Lexical Semantics      | “Research on word meaning, particularly on how many meanings a word has, and how these meanings can be differentiated and described, has been the staple question of linguistic philosophy and semantics since at least Aristotle.” (Béjoint, 1994: 225) |
### Table 1: Presence of terms related to empirical methods in the Cognitive Linguistics Bibliography, divided over five-year periods (1985-2005) (Geeraerts, 2006: 33)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>corpus</td>
<td>n=776</td>
<td>n=1140</td>
<td>n=1881</td>
<td>n=2314</td>
</tr>
<tr>
<td>experiment(al)</td>
<td>4 (0.5%)</td>
<td>18 (1.6%)</td>
<td>68 (3.6%)</td>
<td>215 (9.3%)</td>
</tr>
<tr>
<td>empirical</td>
<td>24 (3.1%)</td>
<td>59 (5.2%)</td>
<td>116 (6.2%)</td>
<td>213 (9.2%)</td>
</tr>
<tr>
<td>data</td>
<td>21 (2.7%)</td>
<td>69 (6.0%)</td>
<td>151 (8.0%)</td>
<td>249 (10.8%)</td>
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<tr>
<td>total</td>
<td>64 (8.3%)</td>
<td>151 (13.2%)</td>
<td>357 (19.0%)</td>
<td>648 (28.0%)</td>
</tr>
</tbody>
</table>

Table 1 Presence of terms related to empirical methods in the Cognitive Linguistics Bibliography, divided over five-year periods (1985-2005) (Geeraerts, 2006: 33)
1.2 Research Significance

1. **Space** is meta-concept in Cognitive Linguistics and Embodiment Philosophy, from which human being understand other abstract conception. As Tyler and Evans (2003: 22) commented, “investigating the meanings associated with spatial particles will offer fundamental insights into the relation between language, mental representation and human experience.”

2. According to Talmy (2000: 178-179), **preposition** is one of the most important structures, based on which other domains are founded.

3. Metaphor not only comes from our bodily experience, but is also influenced by **culture**.

4. **Corpus-based approaches** to cognition study is a new trend in cognitive linguistics.
2. Literature Review

Metaphor

Metaphor in Rhetorics: Aristotle: “theory of comparison”
    Quintilian: “Substitution Theory”

Metaphor in Philosophy: Richards: “Interaction Theory”
    Black

Metaphor is the omnipresent principle of language can be shown by mere observation. That is to say, we can not get through three sentences of ordinary fluid discourse without it”. (1936: 61)

Metaphor in Pragmatics: Grice, 1989; Levison, 1983; Searle; 1987
Cognitive Approaches to Metaphor: Conceptual Metaphor Theory

Lakoff: Metaphor is "understanding and experiencing one kind of thing in terms of another. (1980: 5)

(1) conceptual metaphor can also be referred to as metaphorical concept, which is intrinsic, which is in the process of conceptualization;

(2) metaphorical concept itself is not a direct way of expression, but it deeply restricts the way of speech expression;

(3) metaphorical concept is extracted from daily language;

(4) conceptual metaphor is systematic and reflects the productivity of language.

systematicity
coherence
Metaphorical Mapping

Lakoff & Turner (1999)

(1) Slots in both source and target-domain are mapped, however, in some target domain, slots in target domain are independent;

(2) The relationship both in target domain and source domain is correspondent;

(3) The properties in source domain are projected into the ones in target domain;

(4) Our knowledge on source domain can be used in the target one.
Philosophical Grounding

Experientialism

The cognitive unconscious: “All of our knowledge and beliefs are framed in terms of a conceptual system that resides mostly in the cognitive unconscious.” (Lakoff & Johnson, 1999: 13)

The Embodied Mind: “The architecture of your brain’s neural networks determines what concepts you have and hence the kind of reasoning you can do.” (Lakoff & Johnson, 1999: 16)

Metaphorical thought: In actuality we feel that no metaphor can ever be comprehended or even adequately represented independently of its experiential basis.” (Lakoff & Johnson, 1980: 19)
Classification of Metaphor (Lakoff & Johnson, 1980)

spatial orientation coming from the interaction between human beings and nature is the most basic concept that we live by
characteristics of spatial metaphors (Lakoff & Johnson, 1980)
a. Most of our fundamental concepts are organized in terms of one or more spatial metaphors.
b. There is an internal systematicity to each spatial metaphor.
c. There is an overall external systematicity among the various spatial metaphors, which defines coherence among them.
d. Spatial metaphors are rooted in physical and cultural experience; they are not randomly assigned.
e. In many cases spatialization is so essential a part of a concept that it is difficult for us to imagine any alternative metaphor that might structure the concept.
f. Our physical and cultural experience provides many possible bases for spatial metaphors.
Lakoff (1987:267) Image schemas are relatively simple structures that constantly recur in our everyday bodily experience.

Human bodily movement, manipulation of objects, and perceptual interactions involve recurring patterns without which our experience would be chaotic and incomprehensible. I call these patterns “image schemata”, because they function primarily as abstract structures of images. (Johnson, 1987:xix)

Langacker (1987:217): trajector, landmark and path
3. Methodology

Research Questions:

1. What are the image schemata of preposition “in” “on” and “at”? What is the relationship between each schema? How does conceptual metaphor work in different schemata?

2. What is the semantic clustering of preposition “in” “on” and “at” in different slots of constructions in Chinese and western academic writing? What is the difference between Chinese and western learners?

3. What are the characteristics of the usage of preposition “in” “on” and “at” for the Chinese and western learners? What are the reasons of the differences? What suggestions can we get for foreign language teaching?
Two copora

CHACE Corpus

<table>
<thead>
<tr>
<th>Section</th>
<th># Words</th>
<th># Papers</th>
<th>Average Length</th>
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<tr>
<td>semantics</td>
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<td>26</td>
<td>16550,23</td>
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<tr>
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<td>syntax</td>
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<td>405947</td>
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<td>culture</td>
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<td><strong>5126414</strong></td>
<td><strong>306</strong></td>
<td><strong>16752,99</strong></td>
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</table>
Collostructional Analysis

Gries: “increase the adequacy of grammatical description by providing an objective way of identifying the meaning of a grammatical construction and determining the degree to which particular slots in it prefer or are restricted to a particular set of lexems.” (2003: 1)

Collexem Analysis

Collostruction

| strength |

          dispelled

          attracted

Multiple Distinctive Collexem Analysis

Covarying Collexem Analysis
Table 3 Crosstabulation of accident and the “N waiting to happen” construction

<table>
<thead>
<tr>
<th></th>
<th>accident</th>
<th>*accident</th>
<th>Row Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>N waiting to happen</td>
<td>a</td>
<td>c</td>
<td>a + c = M</td>
</tr>
<tr>
<td>*N waiting to happen</td>
<td>b</td>
<td>d</td>
<td>b + d = N</td>
</tr>
<tr>
<td>Totals</td>
<td>a + b = X</td>
<td>c + d = Y</td>
<td>W = X + Y = M + N</td>
</tr>
</tbody>
</table>
Figure 1 Radical network of preposition “in”

Table 1 **KWIC concordance** for the in+n. construction

Table 2 The frequency of the usage of preposition “in”

Table 3 The distribution of preposition “in” in different domains

Table 4 **Pearson Correlation** between the usage of preposition “in” in different domains and the total

Table 5 Collocate frequencies for the in+n. construction

Table 6 **Crosstabulation of** * and the in+n. construction (*is one certain n.)*

Table 7 Collexemes most strongly attracted to the in+n. construction
Thank you very much!