



# A Cognitive Corpus-based Study of Spatial and Temporal Metaphors in Chinese

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## Abstract

Conceptual metaphors are believed to be ubiquitous in human language and thought which may vary with different socio-cultural contexts. This corpus-based study attempts to investigate the metaphorical extensions of space and time in Chinese, taking three pairs of spatial terms *shang*(up)/*xia*(down), *qian*(front)/*hou*(back), *zuo*(left)/*you*(right) and one temporal term *shijian*(time) as searching words for space and time respectively. The results showed that in spatial metaphors, metaphorical extensions mainly include TIME, STATE, QUANTITY, SCOPE and SOCIAL STATUS which sometimes overlap among these three spatial dimensions, but with one sense being more prominent in one dimension or with some of the senses missing in certain dimensions. In temporal metaphors, three main metaphorical extensions are found, i.e., A MOVING ENTITY, VALUABLES and ANIMATE OR INANIMATE CREATURE. The findings indicate that conceptual metaphor, although rooted into embodied experience, needs to be examined in combination with specific socio-cultural backgrounds.

**Key Words:** Corpus-based, Metaphorical Extension, Time, Space, Chinese.

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## Introduction

Metaphors had long been regarded by traditional linguistics as merely “a device of the poetic imagination and rhetoric flourish” and “a matter of extraordinary rather than ordinary language” (Lakoff & Johnson, 1980). It is not until recent decades that studies on metaphor have shifted from the field of traditional rhetoric to linguistics, philosophy, cognitive sciences, psychology, semiotics, translation and other related disciplines. Previous interdisciplinary research suggested that metaphor is not just a linguistic phenomenon, rather, it plays a pivotal role in human cognition as well. “Metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature” (Lakoff & Johnson, 1980).

Metaphorical concept may have arisen out of our

experiential and cultural experience, so the possible ways of metaphorical extensions may also vary from culture to culture.

Most earlier metaphorical studies follow the traditional introspective approach, which is in a sense subjective in nature due to the heavy reliance on retrospective data. Corpus-based method, by contrast, featuring a strong emphasis on authentic data, has established itself as a robust paradigm in the field of metaphor studies, and has uncovered a body of interesting facts about conceptual metaphors which would not be possible under the traditional paradigm (Lan, 2002; Deignan, 1999; Kovecses, 2000, 2002; Yu, 2016).

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However, the biggest challenge for corpus-based metaphorical studies has been to identify those linguistic expressions manifesting certain conceptual mappings out of the mass of corpus data. There are five common ways of settling this problem: manual sorting, searching for the source domain vocabulary, searching for the target domain vocabulary, searching for sentences containing lexical items from both the source domain and target domain, and searching for metaphors based on “markers of metaphor” (Stefanowitsch & Grices, 2006). In this study, several lexical items are used as the searching words, which are chosen on the criteria of high frequency of occurrences in the corpus and their representativeness of human language and cognition. Mainly included are source domain and target domain vocabulary, and metaphorical markers are also recruited as a complement in cases where the metaphorical percentage of a certain lexical item from either the source or the target domain is too low to provide a sensible picture of its metaphorical mappings.

This article, under the framework of conceptual metaphor theory, studies what metaphorical senses both spatial and temporal terms can extend in Chinese, using three pairs of spatial terms *shang*(up)/*xia*(down), *qian*(front)/*hou*(back), *zuo*(left)/*you*(right) and one temporal term *shijian*(time) as searching words in CCL corpus (Center for Chinese Linguistics PKU). All the concordance lines were selected and identified on the basis of the Metaphor Identification Procedure (MIP; Pragglejaz Group, 2007) and coded by native Chinese speakers. The overall aim of the present study is to depict the metaphorical mappings of space and time domains in Chinese, provide further evidence for future cross-cultural studies and if possible, offer some guidance for teaching Chinese as a second language.

### Spatial Metaphors

Compared with other more abstract concepts, the concept of space is assumed to be more fundamental to human cognition and occupies a central position in our conceptualization of the real world. Many complicated and abstract domains are represented through or parasitic on spatial metaphors which are deeply rooted in our bodily experience, thought and culture, and thus provide multiple possibilities for various metaphorical mappings.

The present section focuses on the spatial metaphors in Chinese and is concerned specifically with how the more concrete concepts of space are mapped onto other relatively more abstract non-spatial domains such as time. Three pairs of spatial concepts, i.e., SHANG (up)/XIA (down), ZUO(left)/YOU(right), QIAN(front)/HOU (back) are chosen due to their relatively high frequency of occurrences in the corpus. The lexical items corresponding to those concepts, namely *shang*(up)/*xia*(down), *zuo*(left)/*you*(right), *qian*(front)/*hou*(back), are selected as the key words for searching the corpus and later analyzed with regard to their concordance and metaphorical extensions in an attempt to unravel how Chinese people employ spatial concept to structure some more abstract notions. By this way, further empirical evidence would be provided to support the findings of previous studies, which might shed light on future cross-cultural metaphor studies and which might foster the teaching and learning of Chinese as a second language.

#### 1) SHANG/XIA Metaphors

I first searched the CCL Corpus using lexical items *shang/xia* as the key words, which is assumed to be linguistically representative of the concept SHANG/XIA. 1780911 and 1002975 occurrences are retrieved respectively. With this vast quantity of data and due to the possibly large percentage of metaphorical occurrences, I used the first 300 hits by random sampling the first 3000 lines for our final identification and calculation. I then manually distinguish between metaphorical and literal usages, eliminating the irrelevant ones and calculate the respective percentages of those concepts that are represented through SHANG/XIA. Not surprisingly, our findings suggest a high percentage of metaphorical uses of SHANG/XIA which takes up 76.3% and 87.9% of their total occurrences respectively. This provides further evidence for the wide popularity of spatial metaphors in Chinese. Table 1 lists the distribution of the five salient domains onto which space domain may be mapped by the metaphorical use of *shang/xia*.



**Table 1.** The distribution of the five most salient target domains of *shang/xia*

Target domains Number ( <i>shang/xia</i> )		Percentage ( <i>shang/xia</i> )
TIME 24/58		8.4/20.9
STATE	13/42	4.5/15.5
QUANTITY	11/18	3.8/6.5
SCOPE	143/86	48.8/31
SOCIAL STATUS	28/39	9.8/14
SPACE	19/13	6.6/4.6
OTHERS	49/21	17.1/7.5
Total	287/277	100/100

As can be seen above, *shang/xia* are mainly used to structure five salient target domains, i.e., TIME, STATE, QUANTITY, SCOPE and SOCIAL STATUS. The corresponding conceptual metaphors might be stated as follows:

- (1) AT/TOWARDS A LARGER QUANTITY IS SHANG  
 AT/TOWARDS A SMALLER QUANTITY IS XIA
- (2) AT/TOWARDS A HIGHER STATUS IS SHANG  
 AT/TOWARDS A LOWER STATUS IS XIA
- (3) AT/TOWARDS AN EARLIER TIME IS SHANG  
 AT/TOWARDS A LATER TIME IS XIA
- (4) AT/TOWARDS A MORE DESIRABLE STATE IS SHANG  
 AT/TOWARDS A LESS DESIRABLE STATE IS XIA
- (5) TO SOME DEGREE OR ON SOME BASIS IS SHANG  
 UNDER SOME CIRCUMSTANCES, CONDITIONS OR INFLUENCES IS XIA

For both *shang* and *xia*, the target domain SCOPE accounts for the most part of their metaphorical uses which reaches as high as 48.8% and 31% respectively. However, when zooming into the specific target domain SCOPE, we may find that *shang* and *xia* may exhibit relatively subtle differences in the specific field they may be recruited. I will briefly explore each of these domains below.

**Time**

A widely recognized universal feature of human thought is the systematic mappings of the more familiar and concrete domains like space onto the relatively abstract domains such as time. But according to the results of our corpus analysis, among the 287 cases of metaphorical use of *shang*, only 24 are related to the time domain, which accounts for only 8.4% of the total concordances of metaphorical *shang*. Among the temporal uses of *shang*, 75% denotes the order or duration of events, for instance, *shangshu* “the above mentioned”, *yishang* “above”, and 25% refers to an earlier time, such as *ba you wenzi ke kao de xinshi shang tui dao le xianshang shiqi* “push the written history to the pre-Shang period”, *zhongguo shanggushi* “the ancient Chinese history”, *shang shiji qibashi niandai* “in the 70s and 80s of last century”. In the similar vein, 58 instances of *xia* referring to the later time which accounts for 20.9% of the total concordance lines, 81% also refer to the sequential order, such as *yixia* “hereinafter”, *ruxia* “as follows”, *xia yi ge yinjie* “next syllable”, *xia yi zhang* “the next chapter” and the like. The rest indicate a later time, such as *xia yi dai* “next generation”, *zhongguo shehui zi song yixia* “Chinese society since the Song Dynasty”.

From the above examples it can be observed that *shang/xia* are used metaphorically to denote time in Chinese. According to some researchers, Chinese native speakers are more likely to think about time vertically rather than horizontally than English speakers. Others argue, on the other hand, that Chinese speakers, consistent with English speakers, actually use horizontal spatial metaphors more often than the vertical metaphors (Boroditsky 2001, 2011; Chen 2007; Yang 2016). Regardless of the disagreement on the priority of either being vertical or horizontal, there is an absolute consensus that sometimes Chinese people do think about time vertically. This is probably due to the fact that ancient Chinese people used to determine the temporal sequence based on some natural phenomena such as rising and falling of the sun, which thereby evokes spatial metaphor and is a direct reflection of human life experience. Writing direction (ancient Chinese tended to write vertically) is another factor which may contribute to the existence of vertical representation of spatial metaphors (Bergan & Chau 2012; Fuhrman & Boroditsky 2010, 2011).



### State

As can be seen from the table 1, 4.5% and 15.5% of *up/down* concordance lines refer to the domain of STATE respectively. Under this target domain, four subdomains are identified. First, *shang* refers to the starting point of a state while *xia* indicates its endpoint. For instance, *shangban* “go to work”, *shangxue* “go to school”, *shangwang* “get on the internet”, *xiama* “be relieved of one’s office”, *xiagang* “lay off”, etc. Second, *shang* is more likely to contain the semantic implication of initiation, continuity or tendency while *xia* in most cases indicates completion or result, such as *zoushang shehuizhuyi daolu* “walk onto the socialist road”, *dai shang qian* “take the money”, *mai xia* “buy”, *an xia* “press”, *jielei xia* “accumulate”. Third, *shang* can be used to express the notion of good quality, such as *shangpin* “top grade”, *gao da shang* “high-end, magnificent and classy” while *down* denotes the sense of bad quality, such as *jiaoyu zhiliang di xia* “poor quality of education”. Fourth, *shang* conveys meaning of north direction while *xia* suggests the south. For example, *bei shang* “travel north” and *nan xia* “travel south”.

### Quantity

According to our data, about 3.8% of *shang* and 6.5% of *xia* are projected onto the domain of quantity, hence the two metaphors: AT OR TOWARDS A LARGER QUANTITY IS SHANG and AT OR TOWARDS A SMALLER QUANTITY IS XIA. For example, *shang sheng* “rise”, *yi shang* “above”, *jia shang* “add”, *xia jiang* “decline”, *yi xia* “below”, etc. The use of spatial expressions *shang* and *xia* to refer to quantity might be closely linked to human cognition of location in everyday life. Just imagine we have a heap of articles, when being continuously added more, its height will be in a higher position that is above the original level. But if some articles are removed afterwards, the height decreases to a lower position. The temperature’s rising and falling in a thermometer also manifests the up and down position (which is lexicalized as *shang* and *xia* in Chinese language) of the mercury column.

### Scope

It can be noted earlier that the majority of metaphorical usages of *shang* and *xia* are mapped onto the domain of SCOPE, accounting for 49.8% and 31% of the total number respectively. Although *shang* and *xia* can both be used to denote SCOPE,

we can still find out their subtle differences from our present data. *Shang* in most cases are used in collocation with some specific field, such as *lishi shang* “in history”, *zhengzhi shang* “in the political field”, or together with the sense of to some degree or in some way, for instance *zai mouzhong chengdu shang* “to some degree” or *zai mouzhong yiyi shang* “in a sense”. In contrast, when denoting the domain of SCOPE, *xia* tends to collocate with some given situations ( 22.1% ), conditions ( 8.1%, environments ( 7%, etc. such as *zai mou xie qingkuang xia* “under some circumstances”, *zai bijiao hao de tiajian xia* “under better conditions”, *zai wangluo huanjing xia* “in network environment”, etc.

Chinese and English are alike regarding the metaphorical use of *shang/xia* in the domain of SCOPE and they both employ exact spatial locations *shang/xia* or *up/down* to identify abstract domain of SCOPE. What sets them apart is the fact that Chinese spatial expressions are relatively more general and vaguer and are capable of denoting a large number of SCOPE senses, while English tends to choose more accurate and specific propositions of various kinds according to diversified actual situations.

### Social Status

*Shang/xia* can also refer to a person’s social status in Chinese Culture. In the present study, 9.8% of *shang* entries and 14% of *xia* entries manifest metaphorical meanings of SOCIAL STATUS. *Shang* usually conveys the higher position in social hierarchy, such as *shang liu shehui jiecheng* “the upper class”, *shang ji* “higher authorities”, and *shang yu* “imperial edict”, while *xia* refers to a lower social status, such as *xia ji* “lower level”, *shou xia* “under the leadership of”, *xiang xia* “rural areas which is assumed to be inferior to cities”. In ancient times, Chinese people often used *zai xia* “I” to call themselves as an indication of modesty.

### 2) LEFT/RIGHT Metaphors

This section deals with the metaphorical extensions regularly associated with the concept of LEFT/RIGHT. While exploring the origin of LEFT and RIGHT metaphors, many researchers argue that human beings map the more specific source concept “hand” onto the more abstract target concept LEFT and RIGHT. Through the analysis of our data from the corpus, it is found that the concepts of LEFT and RIGHT are mainly mapped



onto two abstract domains, namely STATE and SOCIAL STATUS.

I used *left* and *right* as key words for searching the corpus and retrieved a total of 87171 cases of *left* and 82649 cases of *right*. 300 lines are excerpted by random sampling. Those irrelevant instances are abandoned and what was left were 385 instances of *left* and 389 instances of *right*. As can be seen from table 2, most of the *left* (45.5%) and *right* (63.7%) are still used in their original senses, i.e., their baseline spatial meaning, and did not trigger any metaphorical mapping. About 30% of the *left* and *right* (27.3% and 27% respectively) are used in collocations, denoting an approximate number, for instance, *san dian zuoyou* "around 3 o'clock", *80 sui zuoyou* "at about 80". Because I am aiming to take stock of metaphorical extensions of *left* and *right* individually, this part of data is also discarded. 9.1% of *shang* and 3.9% of *xia* express the meaning of STATE while only 2.6% and 1.8% of metaphorical extensions denote SOCIAL STATUS OR IDENTITY. There are also some instances of left/right which are used non-metaphorically, such as names of persons or books, and are hard to categorize. They are grouped under the heading of OTHERS.

**Table 2.** The distribution of the two most salient target domains of left/right

Target domains Number (left/right)		Percentage (left/right)
STATE 35/15		9.1/3.9
SOCIAL STATUS	10/7	2.6/1.8
SPACE	175/248	45.5/63.7
APPROXIMATE NUMBER	105/105	27.3/27
OTHERS	60/14	15.5/3.6
Total	385/389	100/100

**State**

*Left* and *right* is a pair of symmetrical directional expressions, whose symmetry derives from our bodily perception in which our body is centered with left and right hands on both sides. So, concepts whose meanings are conveyed partly through LEFT

and RIGHT are correspondingly affiliated with certain symmetrical senses. In the field of ideology and politics, LEFT and RIGHT are reflected in the negative symmetry of "progress" and "conservatism", such as *zuo pai* "the left wing" and *you pai* "the right wing". Among all metaphorical extensions denoting STATE, 91.7% of the *left* concordance and 97% of the *right* concordance indicate the progress or conservative ideas and attitudes in the ideological and political fields.

In addition, the left and right direction, due to its deviation from its centered point of reference, invoked the sense of a crooked state, implying a devious, unjust and even inaccurate sense, for instance, *pang men zuo dao* "unorthodox ways", *zuo tan* "be biased towards", etc.

**Social Status or Identify**

Spatial metaphor involves our deeply rooted bodily experience, ideas and culture which provide many possibilities for the realization of metaphorical mappings. The spatial metaphor of *left* and *right* is no exception. In our data, the proportion of SOCIAL STATUS or IDENTITY in modern Chinese is very small, accounting for only 2.6% and 1.8% respectively. LEFT refers to the state of being removed or demoted from an official position while RIGHT most probably yields the sense of being in a higher position, for instance, *zuo chengxiang* "left prime minister" and *you chengxiang* "right prime minister". *You chengxiang* is superior to *zuo chengxiang* in official hierarchy. LEFT and RIGHT are relatively more often used metaphorically in ancient Chinese and the expression we can think of concerning LEFT and RIGHT metaphors are for the most cases from the ancient Chinese literature. In ancient China, there existed strict hierarchy in which LEFT is representative and symbolic of being the inferior and RIGHT superior. This explains why the original spatial senses of spatial terms *left* and *right* extend to the more abstract domains, conveying different social statuses under the influence of old rituals and customs.

LEFT and RIGHT are recognized as another pair of concepts in the spatial domain which evolves from our bodily experience. As one of the basic domains of human cognition, it helps to have a better perception of the real world around us by way of projecting the concrete spatial concept onto more abstract non-spatial domains.



**3) FRONT/BACK Metaphors**

In this part, I continue to take stock of another pair of spatial metaphors in Chinese. *qian* and *hou* are chosen as key words for searching CCL corpus and 945647 instances of *qian* “front” and 1022271 ones of *hou* “back” are extracted. I then downloaded the

first 3000 lines and excerpted 300 lines by random sampling. After the removal of some irrelevant exemplars, 276 instances of *qian* and 274 instances of *hou* are picked out for the final identification and analysis. The results are as follows:

**Table 3.** The distribution of the five most salient target domains of *qian/hou*

Target domains	Number (qian/hou)	Percentage (qian/hou)	Linguistic examples (qian/hou)
PAST	62/36	22.4/13.1	<i>qian sulian</i> “former Soviet Union”, <i>qian suo wei you</i> “unprecedented”, <i>xian qian</i> “previously”, <i>kong qian</i> “unprecedented)/ <i>hou lai</i> “afterwards”, <i>si shi nian hou</i> “forty years later”, <i>ci hou</i> “hereafter”
PRESENT	27/0	9.8/0	<i>dangqian</i> “at present”, <i>mu qian</i> “currently”, <i>yanqian</i> “at the moment”
FUTURE	14/27	5.1/9.9	<i>qian tu</i> “future”, <i>qian yan</i> “frontier”, <i>qian jing</i> “prospect” / <i>hou shi</i> “later generations”, <i>hou ren</i> “descendant”, <i>hou dai</i> “future generations”, <i>jin hou</i> “from now on”
EARLIER/LATER THAN AN EVENT	94/89	34.1/32.5	<i>shui qian</i> “pretax”, <i>gaige kaifang qian</i> “before the reform and opening-up”, <i>xue qian</i> “preschool”, <i>zhi qian</i> “pre-service” / <i>hou shi</i> “later generations”, <i>hou ren</i> “descendant”, <i>hou dai</i> “future generations”, <i>jin hou</i> “from now on”
SEQUENCE	31/92	11.2/33.5	<i>qian yi ju</i> “the former sentence”, <i>qian shu</i> “aforesaid”, <i>qian zhe</i> “the former” / <i>hou zhe</i> “the latter”, <i>zui hou</i> “in the end”, <i>hou si ge weidu</i> “the last four dimensions”, <i>hou ban duan</i> “the latter half”
SPACE	30/21	10.9/7.7	<i>qian zhui</i> “prefix”, <i>zhangpeng hou mian</i> “behind the tent”
OTHERS	18/9	6.5/3.3	<i>huang hou</i> “queen”, <i>xiehouyu</i> “a two-part allegorical saying”
Total	287/277	100/100	

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As we can clearly see from table 3, the absolute majority of *qian* and *hou* are used metaphorically, taking up to 82.6% and 89% of the total occurrences respectively. What is intriguing and from the other two pairs of spatial terms is that almost all of the metaphorical extensions belong to the spatio-temporal mappings, referring to different temporal points. *Qian* can be used to convey the meaning of being in the past, at present, in the future, earlier than an event, or in the front position of a sequence. *Hou* can also be adopted to the past and future sense, but what differs from *qian* is that it indicates the sense of later than an event and in the back position of a sequence. It is noteworthy that *hou* cannot be employed to express the PRESENT sense.

the spatial expressions *qian/hou* manifest the most metaphorical extensions whose lexical senses range from PAST, PRESENT, FUTURE, EARLIER OR LATER THAN AN EVENT or front or back in a SEQUENTIAL ORDER.

**Temporal Metaphors**

In summary, this section focuses on the behavior of spatial metaphors of QIAN/HOU in Chinese language. It turns out that in the temporal domain,

This section focuses on the discussion of temporal metaphors in Chinese. As we all know, time is an abstract notion which is invisible and intangible. My aim for this section is to observe and find out how time is conceptualized in Chinese and what kinds of source domains can be mapped onto it. The current study follows the same methodology as the spatial metaphor that has been discussed above and I chose the expression *shijian* “time” as our searching word. The first 2000 lines are downloaded and through Antconc , 2696



concordance lines are finally retrieved. Unfortunately, I only got 14 lines from these large quantity of data after our manual searching, which demonstrate that although the temporal metaphor did exist in modern Chinese, its probability of occurrence is quite low. Due to the small number of my data, I then continue to search the target domain *shijian* in collocation with some metaphorical markers, they are *ru* “be like”, *xiang* “be like”, *hoaxing* “as if”, *fangfu* “as if” and *de* “of (as in the waste of time)” which is a grammatical marker used after an attribute to manifest the relationship between the attribute and the headword. After these searching procedures, I altogether got 209 lines. After the removal of non-metaphorical ones, 78 lines are eventually used for our analysis. Through data analysis it is found that the temporal metaphor is mainly projected from four source domains, i.e., TIME IS MOTION (71.8%), TIME IS VALUABLES (10.3%), TIME IS TESTOR OR CHANGER (6.4%), TIME IS ANIMATE OR INANIMATE CREATURE (11.5%).

**Table 4.** The distribution of the four most salient source domains of TIME

Source domains	Number	Percentage
MOVING ENTITY	56	71.8
VALUABLES	8	10.3
ANIMATE OR INANIMATE CREATURE	14	17.9
Total	78	100

### 1) Time is a Moving Entity

Mapping time onto a moving entity accounts for the largest proportion of time metaphors which reaches as high as 71.8%. This phenomenon is not accidental, rather it might be attributed to the universal cognitive foundation of human beings. Time being metaphorically referred to as a moving entity is consistent with our knowledge of biology. In the human visual system, there is a motion detector which can perceive motion but there is not such a thing as a time detector. Therefore, it is biologically reasonable to recruit the more common and specific spatial motion to understand more abstract time. Among all the metaphorical usages under this concept, nearly 40% of metaphors compare time to the river, like *taotao jiang shui* “the surging river”, *shijian ru hailing ban piao shi* “time flew away like sea waves”. Comparing time to

ivers is a relatively fixed image in traditional Chinese culture which is probably influenced by the Confucious famous lines which says *shi zhe ru si fu, bu she zhou ye* “The passage of time is just like the flow of water, which goes on day and night”.

### 2) Time is Valuable

Time can be compared to money, a certain limited resource or a valuable commodity, which is also a very common temporal metaphor and takes up 10.3% of the total. For example, *shijian zui zhengui* “time is most precious”, *shijian shi zui xiyou de ziyuan* “time is the rarest resource”, *shijian shi chuochuoyouyu de* “time is more than sufficient”, etc. The reasons behind this metaphor is that people always work to create value and labor time is often regarded as one of the most important quantitative criteria of one’s work value, therefore time has gradually turned into a valuable item. After the rise and prosperity of modern commodity economy, time and money are even more closely linked and time can be spent, wasted, saved, planned, cut, etc.

### 3) Time is Animate or Inanimate Creature

It is also a common source of time metaphor by comparing time to human beings, living species or inanimate objects, changers, or examiners which accounts for 17.9% of the time metaphor. In the process of the interaction between human, nature and the society, time is gradually entrusted with similar characteristics with the human beings and inanimate objects in the real world and at the same time it seems to have its own life, thinking, judgment, feelings and strength, like a real creature. For example, *shijian xing yi ba canren de shuazi* “time is like a cruel brush”, *shijian xiang yi ge wuliao de shouyuzhe* “time is like a boring prison guard”, *shijian fangfu shi lei bing le* “time seems to be sick from work”, *shijian xiang chunü de yanjing* “time are like maiden eyes”.

To conclude, there are mainly three general types of time metaphors in Chinese. Of course, several more specific categorizations have been proposed by some Chinese scholars according to different criteria under the guidance of different research methodology (Chen&Huang 2006), but our present data only found some of their classifications which is probably due to our limited data or our more general way of categorization. Despite the differences, an increasingly large body of literature has indicated that English and Chinese temporal metaphors demonstrate great cross-cultural



similarities. This reveals that human psychological experience of time is very much the same as some other more familiar human experiences whose perception and psychological representation are both determined by human-specific physiology and cognition.

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