

Comparative Study of Semantic Components of Subjective Motion between English and Chinese

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Abstract: Subjective motion, which is attracting increasing attention in research on the space and motion during the latest decades, characterizes the use of motion verbs to depict stationary sceneries. This study examines subjective motion in English and Chinese by using authentic materials collected from National Geographic, with the purpose of investigating the similarities and differences of semantic components between English and Chinese.

Keywords: Subjective Motion; Semantic Components; English and Chinese.

1. Introduction

Motion is one of the most pervasive and fundamental experience around people. Riding a bicycle, being pushed into a building, or watching a balloon caught in the wind are all experiences that involve motion. Given universal properties of physical nature and human perception, perhaps it would be reasonable to assume that languages across the world would treat motion fairly similarly. Talmy proposes “a situation containing movement or maintenance of a stationary location alike as a ‘motion event’” (Talmy 1985: 61). According to Talmy (2000b), a motion event consists of six basic components; figure, ground, path, motion constitute the central or “internal components”, and manner and cause are considered as “external co-event components”.

(1) a. The internal components of a motion event

Figure: the object that moves

Ground: the entity that the Figure is moving in relation to

Path: the trajectory of the Figure or the course followed by the Figure with respect to the Ground

Motion: the fact that some entity changes its location

b. The external co-event components of a motion event

Manner: the way in which the Motion is performed

Cause: the cause due to which the Motion originates

Motion is a multifaceted phenomenon in both experience and language (Blomberg 2014). People’s experience with physical motion can be figured into their understanding of other kinds of motion, and a variety of motion sentences thus engender. For example, verbs of motion can, at least in some languages, even describe static situations. This time, the position or configuration of a spatial extension is highlighted; physical yet static entities such as roads, mountains, or cables serve as the figure and the like, as in *The highway goes through the mountains* or *The tattoo runs along his spine*. These non-literal uses of motion language are somewhat paradoxical since they include a motion verb and a stationary scene, but no actual movement involved. These are called subjective motion sentences (cf. Langacker 1987; Matsumoto 1996). According to Talmy’s definition, verbs expressing subjective motion are verbs whose basic reference is to motion, but which actually describe stationary situations (Talmy 2000a).

Subjective motion sentences, which can be considered as special spatial expressions of motion events, also consists of

several semantic components aforementioned. The aim of this study is to analyze and investigate the similarities and differences of semantic components between English and Chinese subjective motion expressions.

2. Methodology

To compare similarities and differences of English and Chinese subjective motion expressions, it is indispensable to collect a large number of sample sentences. Slobin (2003) argues that it is of great help and use to conduct comparative studies between the original database and translation versions because the patterns of narrative expressions to some extent reflect that of conceptualization. According to him, the parallel materials of this study are advised to select from authentic original English and its Chinese translations.

This study collected all the subjective motion sentences from the original text National Geographic (2018-2020), a world’s leading travel magazine; their corresponding Chinese translations were selected. In total, 101 sentences were found to conform to target, with 51 English sentences and 51 Chinese sentences respectively. On the basis of these aspects, a self-built parallel database was established in preparation for the research.

3. Results and Discussion

3.1. Comparative Analysis of Figure and Ground

The term of figure is taken from Gestalt psychology (Talmy 2000b). In essence, subjective motion expresses the depiction of the figure’s shape and spatial characteristics though it incorporates a motion verb. Based on previous observations, figure is encoded by noun in most Chinese and English subjective motion expressions, serving as the subject. Examples are as the following:

(2) A single pipeline threads off to the west, toward the distant brown haze that perpetually hangs over Prudhoe Bay, the industrial center of the North Slope. (National Geographic, 201806: 112)

“一条油管向西蜿蜒，朝着遥远的北坡工业中心普鲁德荷湾上空那片永远不散的褐色烟雾而去。”

(3) The roadless reserve, which stretches from boreal forests north into ice deserts, receives just a few hundred visitors a year. (National Geographic, 201807: 16)

“此处没有道路的保护区从极北林区向北延伸至沙漠，每年只有几百名游客造访。”

In terms of the classification of figures in subjective motion, the criterion proposed by Han (2012) worth mentioning. Han divides figures into three types – Type I, Type II and Type III. Type I refers to liner objects that possess metonymic relation with ideal cognitive model of Motion, such as road, trail and lane. Type II implies to linear entities that bear no metonymic relation with ideal cognitive model of Motion, such as coastline, dam and wire. Type III refers to stretched surface

which generally has no relation with ideal cognitive model of Motion, such as lake, yard, plain, grassland and plateau. Different from Type I and Type II, Type III is not necessarily linear or narrow, yet it can be stretched in a dimension.

Based on the standards mentioned previously, the figures in the sample sentences will be sorted. A total of 102 example sentences of both languages are collected and 51 figures are singled out from each language. Table 1 listed below includes all the detailed statistics of figures in English and Chinese sample sentences (the numbers in the brackets indicate the tokens of that figure).

Table 1. Distribution of Different Types of Figures in English and Chinese

Type	Figures in English	Figures in Chinese	Frequency	Percentage
Type I	channel, route (3), lane, subway line, rail lines, rivers (3), limestone steps, peaks, ways (2), trail (3), path, pavement, highway, corridors, footrail, tributaries, currents, stone ghats	水道, 路径 (2), 跑道, 地铁线, 铁路路线, 河流 (3), 石灰岩阶梯, 路线 (3), 山峰, 小径 (2), 小路, 人行道, 公路, 走廊, 步道 (2), 支流, 水流, 石阶	25	49%
Type II	pipeline, strip, pillars, line, cracks, heavy industries, cardamom plants, branches, seam, canvases	油管, 长带, 巨藻柱, 绳索, 裂缝 (2), 重工业厂, 草果植株, 树干, 画作	10	20%
Type III	tundra, refuge, island, reserve, pyramids, peninsula, Tokyo, Gorongosa, ocean ecosystem, area, floodplains, strip, valley, Line Islands, watery area, glaciers	苔原, 保护区 (2), 岛屿, 金字塔, 半岛, 东京辖区, 哥隆戈萨国家公园, 生态系统, 区域, 泛滥平原, 狭长地带, 山谷, 莱恩群岛, 水域, 冰山	16	31%
Total			51	100%

It can be seen in Table 1 that most of the figures in English has their corresponding Chinese versions. All the three types of figures can be found in English and Chinese subjective motion expressions, with Type I accounting for the majority in both languages. In addition, it is found that all the figures in both languages comply with three critical features: [+IMMOVABILITY], [+SPATIALLY EXTENDED] and [+CONTINUITY]. That is to say, figures collected from the English and Chinese sample sentences, such as lane, pipeline and tundra in English and 跑道 “pǎodào”, 油管 “yóuguǎn” and 苔原 “táiyuán” in Chinese, remain stationary. They are usually inherently linear entities, or distributed in a line. Additionally, although Matsumoto (1996) argues that the attribute of [+TRAVELLABILITY] is a prerequisite for Japanese subjective motion expressions, there is no such restriction on figures of both English and Chinese expressions.

Ground refers to the reference object with respect to the figure’s path. It is typically integral component of the path, marking the origin, the middle ground, or the end-point. The data retrieved from the material demonstrate that in most cases, subjective motion sentences in English and Chinese involve ground information. For example,

- (4) a. origin: e.g., come out of the tunnel /从隧道里出来
- b. middle ground: e.g., pass through the forest /穿过树林
- c. end-point: e.g., extend to the ocean /延伸到大海

3.2. Comparative Analysis of Path and Manner

Subjective motion descriptions are those whose basic reference is to motion, but which actually depicts stationary objects. Therefore, path and manner are also essential semantic components, which are always encoded by motion verbs. In our study, motion verbs are categorized into manner verbs and path verbs. Manner verbs refer to the way where the component of figure carries out a motion, such as crawl,

walk and dash in English and 爬 “pá”, 走 “zǒu” and 冲 “chōng” in Chinese. Path verbs refer to the trajectory where the component of figure moves, typically with regard to other reference objects, namely the ground, such as enter, descend, rise in English and 进 “jìn”, 下 “xià”, 起 “qǐ” in Chinese. An example is illustrative below.

(5) The refuge stretches from the mountains to the Beaufort Sea, covering 19.3 million acres. (National Geographic, 201806: 118)

“保护区从这座山脉一直延伸到波福海，涵盖 780 万公顷土地。”

In Example (5), motion is encoded by the manner verb stretch in English. When combined with the prepositional phrase from the mountains to the Beaufort Sea, it expresses something connected with path information. In Chinese version, on the contrary, motion is encoded by two verbs, with 延伸 “yánshēn” being manner verb and 到 “dào” functioning as path verb.

After a detailed analysis of the English examples from the self-built small database, it is concluded that in most cases, motion is encoded by manner verbs plus prepositional phrases, such as from, along and across. Examples are as the following:

(6) a. That’s what passes for affordable housing along the peninsula that stretches from San Francisco to San Jose. (National Geographic, 201902: 125)

b. The path to Cho’s Cardamom wove upward through waist-high brambles that scratched at my bare legs. (National Geographic, 202002: 147)

The distribution of motion verbs in English is shown as follows:

Table 2. Encoding of Motion Verbs in English

	Frequency	Percentage
Manner Verb	40	78.4%
Path Verb	11	21.6%
Total	51	100%

In the table listed above, compared with path verb taking up percentage of 21.6%, manner verb takes an overwhelming percentage of 76.4%, which accounts for the largest. It indicates that in English subjective motion expressions, manner verb is mostly used and it frequently appear in combination with prepositional phrases.

Chinese, on the contrary, always possesses a serial verb construction which allows for at least two verb slots in one single clause. For example,

(7) 巨藻柱可以从海面下 45 公尺深处一直延伸到海面, 有时一天可长出半公尺。(《国家地理》, 201907: 98)

“Pillars can reach from as deep as 150 feet to the surface, sometimes adding a foot and a half in a day.”

In this sentence, the first verb 延伸 “yánshēn” is a manner verb; when directly followed by the second verb 到 “dào”, the path information is presented.

Table 3. Encoding of Motion Verbs in Chinese

	Frequency	Percentage
Manner Verb	17	33.3%
Path Verb	6	11.8%
Manner Verb + Path Verb	28	54.9%
Total	51	100%

Table 3 shows the distribution of different motion verbs in Chinese sample sentences. The combination of manner verb and path verb takes up an overwhelming majority, up to 28 out of 51 selected sentences. It verifies that in Chinese subjective motion sentences, motion is mostly encoded by “manner verb and path verb” due to its ubiquitous but characteristic serial verb construction.

Additionally, in a similar way, Chinese utilizes alternative expressions of manner, that is to say, to “resort to separate expressions to convey these rich and fine distinctions” (Ibarretxe-Antuñano 2004: 325). For example,

(8) 从南部的寒带针叶林, 越过布鲁克斯山脉的峭壁与高山草原, 再到高低起伏、最后平缓伸入波福海的苔原, 整个北极国家野生动物保护区是个占地超过 7 万 8000 平方公里的完整生态系。(《国家地理》, 201806: 104)

“From the taiga forest in the south, over the crags and alpine meadows of the Brooks Range, to the rolling tundra that flattens out to the Beaufort Sea, ANWR (Arctic National Wildlife Refuge) is more than 30,000 square miles of intact ecosystem; only a few scattered cabins reveal the hand of humanity.”

In this example, the adverb 平缓 “pínghuǎn” modifies the verb 深入 “shēnrù”, indicating that the figure extends

gently or imperceptibly towards the ending point. Besides adverbs, it is quite common to use adverbial clauses, or adverbial phrases, sometimes even descriptions.

4. Conclusion

The present study examines subjective motion in English and Chinese, making a comparative analysis of the encoding of semantic components in both languages. It is found that it is found that all the figures in both languages comply with three critical features: [+IMMOVABILITY], [+SPATIALLY EXTENDED] and [+CONTINUITY]. Besides, sentences without ground are unlikely to occur or very rare in subjective motion. Moreover, the result shows that in English subjective motion expressions, manner verb is mostly used and it frequently appear in combination with prepositional phrases. On the contrary, in Chinese subjective motion sentences, motion is mostly encoded by “manner verb and path verb” serial verb construction.

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