

Iconic Sequencing of Motional Progression in Mandarin

Chinese

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Abstract: Motion verbs in Mandarin Chinese have been a major focus of interest in recent decades. However, while many studies have shown the semantic/syntactic characteristics of motion verbs, few attentions have been given to the fact that whether a basic picture constrain for motion verbs in Mandarin Chinese. In this paper, as motion verbs consist of certain semantic components, which are Manner, Path, Direction, Endpoint, Locus, and Deictic, and these components, we take an iconic consideration to integrate the issue of motion verbs, and our collected data from corpus exhibit an iconic sequencing of motion verbs that realizes a natural progression of motion events in Mandarin Chinese. Under this progression, the morphemes of motion verbs can be considered an implicational hierarchy that may imply one or more semantic components, which reflect on particular semantic attributes, such as 回 ‘to come back’, which implies Path and Direction, and 翻 ‘to turn over’, which bears the components of Manner and Path. By considering the semantic components, Manner verbs mean the way in which a figure carries out a motion, such as 飛 ‘to fly’, to show the way of the motion. Path verbs mean the trajectory over which a figure moves to another object, such as 移 ‘to move’. Direction means whether a motion verb shows fixed direction or not, and no words in Chinese represent only the component of Direction. Endpoint is a stop at a certain position, such as 到 ‘to arrive’, 至 ‘to arrive’, or 臨 ‘be near’. A verb may include one or more elements, such as 飛 ‘to fly’ including only Manner, or 進 ‘to go in’ including Direction + Endpoint. If we assume that a given meaning of a word can be attributed to its syntactic behaviors (Talmy 1985, 2000), the grammatical relevance as a piece of evidence that defines the status of each semantic component, and the order of motion verbs are constrained by the iconic principle.

Keywords: Motion Verbs, iconic principle, Mandarin Chinese

中文動詞漸進性的圖像序列

摘要：中文行動動詞在近十年來一直是研究的焦點。許多研究著重在行動動詞的語意和句法特性，卻鮮少點出其動詞有基本圖像之事實。本研究指出，中文行動動詞包含特定的語意成分，包含方法(manner)，路徑(Path)，方向(Direction)，結束點(Endpoint)，地點(Locus)，以及指示詞(Deictic)。這些成分也將行動動詞的議題融入，由語料庫搜集之語料也呈現出行動動詞的圖像序列，實踐中文行動事件自然漸進性。在此自然漸進性中，行動動詞的詞素認為具有階層的隱含性，隱含一至多個語意成分，而反映在一字的語意特性上，像是「回」隱含了路徑(Path)和方向(Direction)、「翻」則帶有方法(manner)和路徑(Path)成分。至於語意成分的部分，方法動詞意思是一物體執行一行動，像是「飛」只包含方法之成分。路徑動詞則是一物體從一地點移動到另一地點呈現之路徑，像是「移」。方向則是一行動動詞是否顯示固定之方向性，中文沒有任何一動詞可只代表方位成分。結束點則是一物體停留在某特定之地點，像是「到」、「至」、「臨」。一中文行動動詞可能包含一至多個成分，像是「飛」只包含方法之成分，「進」則包含方向和結束點之成分。如果假設一文字已知的語意會反映在句法表現上(Talmy 1985, 2000)，則每一語意成分可由一些關連的語法作為佐證，行動動詞的序列也可藉由圖像理論有所限制。

關鍵詞：行動動詞，圖像理論，中文

1. Introduction

According to FrameNet, the general definition of motion verbs is that some entity (Theme) starts out in one place (Source) and ends up in some other place (Goal), having covered some space between the two (Path). Alternatively, the Area or Direction in which the Theme moves or the Distance of the movement may be mentioned. Different from English motion verbs together with prepositions, which express manner, path, direction and endpoint clearly, there is rich in the semantic properties in the motion words themselves in Chinese. Nevertheless, recent studies have shown that the semantic characteristics of motion verbs in Chinese differ from the traditional analyses that simply take languages into Satellite-Frame languages or Verb-Frame languages (Slobin 2004). As in the examples (1), (2) and (3), it is clear to see that English motion verbs carry 'motion' component only, such as 'ran' in (1), but Chinese motion verbs carry one or more components, such as 攀到 in (2), and 走進 in (3).

- (1.) I ran out of the kitchen.
 [Figure] [Motion+Manner] [Path] [Ground]
- (2.) 我 攀 到 岩石 上。
 [Figure] [Motion+Path] [Endpoint] [Ground]
- (3.) 他 走 進 去 了
 [Figure] [Motion+Path] [Direction+Endpoint] [Deictic]

This study builds recent analyses of motion verbs (e.g., Slobin 2004) by investigating the possible constraints for the combination of semantic components of motion verbs in Chinese. The result of the study suggests that motion verbs should be integrated into a motional progression with an iconic consideration. It is important to note that, as we notice that the concept of motion verb can be understood in terms of different aspects or classifications, in this study, we only focus on the autonomous motion verbs that are under a translocational consideration. Hence, causative non-translocational motion verbs are beyond the scope of the present study.

2. Previous Proposals

While studies of Motion Verb have been paid much attention from different theoretical perspectives, such as Decompositional analysis (Jackendoff 1990), Formal Semantics (Asher and Sablayrolles 1995, Verkuyl 1993), Typological description of regularities (Sablayrolles 1993, Laur, 1991), Lexicalization pattern (Talmy 1985, 2000); Interface between semantic structure and argument structure (Levin and Rappaport 1995), and Compositional analysis of aspectual properties (Tenny 1995), we take the position that the domain of meaning is not independently of its grammatical relevant and/or syntactic properties (Talmy 1985, 2000). Following this consideration, the study seeks to understand on how semantic components of motion verbs operate and how they can display in syntactic expressions.

With regarding to the domain of meaning and the their surface expression, Jordan Zlatev et. al. (2006) proposed the concept of Translocation, which is the continuous change of an object's average position according to a spatial frame of reference, as in the example 'John ran into the room'. Talmy (1985, 2000) argued that there exist several semantic elements in motion verb where are Figure, Ground, Path, and Motion¹, and these semantic elements and their lexicalization pattern are at work across languages though the Event Typology (Satellite-Frame languages vs. Verb-Frame languages) may vary. According to Slobin (2004), manner verbs are the way in which a figure carries out a motion, such as 跑 and 跳. Path verbs are the trajectory over

¹ The semantic elements are Figure, Ground, Path, and Motion. Figure and Ground are similar to what Fillmore says Location, Source, Goal, and Path.

which a figure moves (to another object [ground]), such as 進, 離, 升, 退, and 落. Neutral verbs are the verbs that do not express any notion of translational motion in the normal context, such as 摸, 站, 躺, and 坐. However, 摸 adds 到 to be 摸到, which becomes a manner verb.

A worth to note is that, however, whether Mandarin Chinese should be considered as Satellite-Frame languages or Verb-Frame languages is still controversial. Slobin (2004, 2006) and Chen and Guo (2009), for example, proposed that the motion events in Chinese are neither referred to Satellite-Frame languages or Verb-Frame languages, since both event types can be found in Mandarin Chinese, and then argued that Chinese should be analyzed into Equipollently-Frame language, which is that the motion verbs in Chinese are expressed with manner and path components by equivalent grammatical forms, such as 跑出, 跑 has manner and 出 has path. They also proposed the possible combination of patterns with Motion, Path, and Deictic in Chinese, which are Manner+Path+Deictic, Manner+Path, Manner+Deictic, Path+Deictic, Path+Path, Path+Path+Deictic, Manner, Path, Deictic, and Manner+Manner.

However, while many studies have reached a common agreement that the existence of possible semantic components is at work, several interesting questions still remain unknown: 1). What is the big picture of motion verb in general? More specifically, what are the characteristics of Motion verb in Mandarin Chinese. 2). If motion verbs can be identified in term of several semantic components (Talmy 2000), is there any semantic / syntactic principle to define them, if yes, what are the semantic / syntactic principles for Mandarin Chinese? 3). If the semantic components of motion verbs can be identified, what are the interrelationships among them?

3. The issue

The data are mainly collected from Sinica Balanced Corpus of Modern Chinese². In general, we classified motion verbs into five semantic components, i.e., Manner, Path, Direction, Endpoint, and Deictic, and certain motion verbs can be found to have one single semantic component in one hand; some may share more than one semantic component in other, an implication that the possible combination of components can be made³ (Chen and Guo 2009), as in the examples of Manner (走、穿、跳), Path (移、經), Endpoint (到、臨), Deictic (來、去), and MP (追、流、翻、衝、飄、閃、滾) MPD (掉、落、登、浮、攀、湧) PDE (回、過、上、下) DE (進、出、入、離).

² Due to the limit of time, the initial data is mainly collected from Sinica Balanced Corpus of Modern Chinese (<http://db1x.sinica.edu.tw/kiwi/mkiwi/>). However, we also take Chinese Words Sketch (CKS) (<http://wordsketch.ling.sinica.edu.tw/>) and Google (www.google.com) as references when needed.

³ However, a pure Direction cannot be found in our data.

Observation:

Although the grammatical relevance cannot directly reflect on the data we collected, it is a piece of evidence that uncovers a fact that each semantic component(s) do exist, which let us precisely define or classify each semantic component by investigating the syntactic behaviors. For example, every verb has slight semantic differences by the test of adding words. Manner verbs denote that the object does a motion with a particular way, but path verbs add distance words or spatial words to show the degree of movement of the object. A verb incorporating manner, path, and direction shows a fixed direction and cannot use adverse word to cancel the direction, as the example 攀下, 攀 means to climb up and cannot use 下 to show the opposite direction. A verb with manner, path, direction, and endpoint, such as 登 cannot add 回 to become 登回, probably because 登 means the fixed position to reach but adding 回 to show that someone or something leaves the position. Verbs combining with path, direction, and endpoint, such as 回, 過, 上, and 下 tend not to add 漸漸 to the verbs. Verbs with direction and endpoint, such as 進, 出, and 入 cannot add 回 and 一直, because the verbs with direction and endpoint denotes that someone or something finishes moving towards a position and is on the position. Verbs with endpoint, such as 到, 至, and 臨 usually add time duration words after the verb.

Another observation is that, when the literature (Chen and Guo 2009) have proposed the possible combination for the morpheme of motion verbs in Mandarin, we observe that the combinations are not random. For example, certain semantic components are orderly followed by a particular one, and the reversed order cannot be found. For example, 走-到 vs. *到-走 翻-過 *過-翻. 掉-進 *進-掉

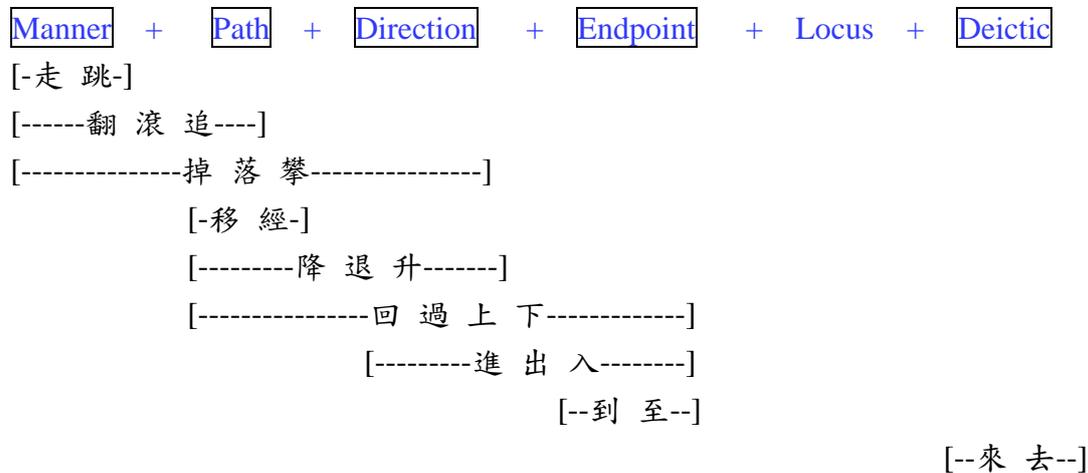
4. Our Proposal

In terms of the above observations, we argue that motion verbs dictate the sequencing of motion events in Mandarin Chinese, and these motion events can be considered as a motional progression or “degree” with an iconic point of view. To put simply, fundamental motion events begin with Manner, followed by Path, Direction, Endpoint, and ended up with Deictic⁴. Considering the internal process of progression

⁴ According to Slobin (2004), manner verbs are the way in which a figure carries out a motion, such as 跑 ‘to run’ and 跳 ‘to jump’. Path verbs are the trajectory over which a figure moves (to another object [ground]), such as 進 ‘to go in’, 離 ‘to leave’, 升 ‘to rise’, 退 ‘to move backward’, and 落 ‘to fall’. Direction means that a verb carries a fixed way, such as the upward way or downward way. Endpoint is that a person or an object stops at a certain position or not. Note that a NP-like element, Locus (a position or a place), is involved in this progress is because Endpoint is often found to be followed by a Locus. Deictic is that their semantic meaning is fixed but their denotational meaning varies depending on time and/or place.

of motion verbs as a whole, the manner of motion, firstly, displays with a given way but its sense of meaning does not inherently presuppose the translocation. Furthermore, when a motion “starts to move”, a path will naturally be made (Path) and a relative direction will then be decided (Direction). Moreover, once the ultimate goal arrives (Endpoint), a possible location, but not necessary, will be emerged. Because, as mentioned above, some motion verbs can be found with more than one semantic component, it is not uncommon that some of motion verbs are said to be simultaneously carrying with several components. In general, the progression we discuss can be illustrated in the following figure:

Iconic Sequencing of Motional Progression:



The above motion progression reveals an implicational hierarchy (from the right side to the left one) of semantic components of motion events in Mandarin Chinese. In other words, the order of the sequencing of semantic components cannot be randomly reversed and the combination of semantic components of motion verbs we discuss here seems to be under a relatively fixed combination that orderly displays an implicational order. Again, the seemingly mechanism behind for the order, as we argue, are based on the iconic sequencing of motion progression in Mandarin Chinese. The more components a motion verb carries, the more specific and complex the semantic meaning is. If the cognition and culture can be reflected on the usage of language, this is a possible reason for why one has to follow the motional progression we propose.

5. Conclusion

In this study, we propose a model of motional progression to unify the semantic components of motion verbs in Mandarin. In Mandarin Chinese, although the semantic characteristics of motion verbs seem to be in subtle differences, it is the iconicity that

underlies the motion verbs and imposes a sequencing of semantic components of motion verbs. In other words, each semantic component follows an implicational order, showing a fact that motion verbs in Mandarin do not disarray but follow an iconic principle, together dictating the sequencing of motion events in Mandarin Chinese. While several Chinese linguists have shown that Chinese are highly related to the iconicity (e.g., Tai 1985), in this study, we hope to show that the similar issue that lexical domain is also highly correlated to the iconicity in Mandarin Chinese.

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