

Space, Events and Language Acquisition
in Mandarin

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Abstract

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This dissertation examines the syntax and semantics of Mandarin spatial expressions from a comparative perspective grounded in the theoretical framework of event semantics. A thorough understanding of the linguistic encoding of space enables us to gain insight into language specificity, and language universals underlying surface variation. The putative language universals discussed in this study include aspect shift of the verb (Smith 1997; Rothstein 2004), spatial PPs as event modifiers (Parsons 1990), and Figure-Ground asymmetry (Miller and Johnson-Laird 1976; Talmy 1983). These universals allow us to account for, for instance, the distribution and interpretation of Mandarin spatial PPs headed by *zai*, which are determined by the event structure of the co-occurring verbs (Fong 1997; Liu 2009). When *zai*-PPs occur before a placement verb, an Accomplishment, they are potentially ambiguous due to subevent modification of the PPs. When *zai*-PPs occur after a posture verb, they express a static location, or a result location, since the verb undergoes aspect shift from State, its default event type, to Achievement, the derived one. In spoken Mandarin, only verbs that have a dynamic/result state component in their event structures can take postverbal *zai*-PPs. Verbs that can enter two-argument locative subject constructions should also have a dynamic/result state in their event structures.

Mandarin has its language-specific properties and complexities: information about the axial parts of the reference entity is encoded by localizers in Mandarin, whose status as nouns or postpositions is still debated; Mandarin LP-formation is complex, with some variants depending on the nature of the DP subcategorized by the localizer.

The present study includes a corpus study of Mandarin-speaking children aged between 1;9 and 6;0, and an experimental study on five groups of children (2-, 3-, 4-, 5- and 6-year olds) with an adult control group. Inconsistent cues in the input slow down acquisition: children up to 6;0 omitted localizers that are obligatory, and allowed the localizer *li* 'inside' to follow proper names; 4-year-olds significantly differed from adults in tolerating non-target V-Location word order, as the mapping of Location to

syntactic position is not consistent. Children's overgeneralization indicates a rule-based learning mechanism. Cognitive development manifests its influence on the acquisition orders of localizers and children's reliance on deictic pronouns, the viewer-centered perspective and the aligned reference strategy.

The empirical findings help to resolve some linguistic issues. Children as young as 3;0 are sensitive to the ambiguity of *zai*-PPs with placement verbs and posture verbs, providing ontogenetic evidence for the category of event, and for the psychological reality of aspect shift and (sub)event modification. The directional reading of preverbal *zai*-PPs with placement verbs is preferred over the locational one by children and adults, suggesting the salience of the result state in the event structure of placement verbs. The locational reading is preferred to the directional one by children and adults, as the default event type of posture verbs is State. In forming LPs, children used *de*, which takes nouns after it, more than adults, supporting Li's (1990) analysis of localizers as nouns.

Key words: Mandarin, acquisition, event, event structure, localizer

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摘要

本論文通過事件語義學的理论框架，以跨語言的視角來研究漢語普通話中空間表達方式的句法及語義問題。通過對空間概念在語言中的編碼的深入研究，我們將能夠對語言獨特性以及潛藏在表層差異下的語言共性有更多瞭解。本研究中討論的可能的語言共性包括：動詞的事件類型轉換（Smith 1997；Rothstein 2004），空間介詞短語是事件修飾語（Parsons 1990），以及目的物-參照物非對稱性（Miller and Johnson-Laird 1976；Talmy 1983）。這些語言共性使我們能夠解釋和描述漢語普通話中“在”引領的空間介詞短語的分佈和解讀——它們是由與“在”連用的動詞的事件結構決定的（Fong 1997；Liu 2009）。當“在”短語出現在放置類動詞（一種完成體動詞）前時，它們可能會有歧義，因為它們可以修飾兩個子事件中的任何一個。當“在”短語出現在姿態類動詞後時，它們表達一個靜態位置或是一個動作的結果位置，因為動詞經歷了從狀態體（它的預設事件類型）到成就體（它的衍生事件類型）的事件類型轉換。在普通話口語中，只有事件結構中含有動態或結果狀態的動詞可以後接“在”短語。能進入雙論元處所主語句的動詞的事件結構中也必須含有動態或結果狀態。

漢語普通話還有它的獨特性和複雜性：參照物的軸向信息在普通話中是由方位詞表達的，方位詞的詞類是名詞還是後置詞仍在討論之中；方位詞短語的構成規則很複雜，根據方位詞所帶的名詞短語的不同有不同的變體。

本研究由語料庫研究和實驗組成：語料庫涵蓋了 1 歲 9 個月到 6 歲的普通話兒童的語料，實驗測試了 2 到 6 歲 5 個兒童組和一個成人對比組。我們發現語言輸入中不一致的線索給語言習得帶來困難：有些兒童到 6 歲還會省略必須要的方位詞，有的會接受專有處所名詞後加不該加的方位詞“裡”；4 歲兒童對不合法的“動詞-處所”語序接受度明顯高過成人，因為普通話中處所的概念可以在不同的句法位置實現。兒童對規則的過度泛化顯示了基於規則的學習機制。認知發展對方位詞的習得順序以及兒童對直指性代詞、視者中心參照系統和順向參照策略的依賴均有影響。

本研究也解決了一些語言學理論問題。兒童早在 3 歲就掌握了“在”引領的介詞短語的歧義，證明了“事件”這一範疇的存在，以及事件類型轉換、(子)

事件修飾的心理真實性。放置類動詞前的“在”短語更傾向于被兒童及成人解讀為終點，說明該類動詞的事件結構中結果狀態更為顯著。姿態類動詞後的“在”短語更傾向于被兒童及成人解讀為處所，顯示該類動詞的基本事件類型是狀態。在產出方位詞短語時，兒童比成人更傾向使用“的”。因為“的”後只能接名詞，兒童語料支持了 Li (1990) 方位詞是名詞的觀點。

關鍵字: 漢語普通話 習得 事件 事件結構 方位詞

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