Paths and Place: Spatial Adpositions in Mandarin Chinese

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This paper explores the syntactic structure of spatial adpositions in Mandarin building on Li's (1985) proposal and applying the cartographic approach from Svenonius (2008). Chinese spatial adpositions have been widely discussed. Svenonius (2007) believes that there is no spatial prepositions like up, down, behind, and below that express spatial relations in Mandarin. Po-Ching and Rimmington (2004), on the other hand, posit a set of spatial postpositions, including *shang* 'above', *xia* 'below', *li* 'inside', *wai* 'outside', *qian* 'in front of', *hou* 'behind', *zuo* 'left', and *you* 'right', which often occur with a special group of suffixes. However, these analyses do not provide an account for the syntactic structure.

Li (1985) observes that Chinese contains both "true PP" and "nominals in disguise". Prepositions like *wei* 'for', and *cong* 'from' are so-called "true PP" while words like *shang* 'surface' and *wai* 'outside/exterior' are actually locative nominals. These nominals can occur freely with place noun like *mian* 'side' and become subjects in the sentence. The following example presents that the location DP (in boldface) is the subject. The place noun *mian* 'side' alone cannot be the subject.

(1) ***shangmian/ *mian***   *hen   ganjing*
     Upper-side   very   clean
     'The surface is very clean'

Svenonius (2008) has proposed a fine-grained framework of spatial prepositions in English. He suggests that Place can be decomposed into categories like K, Axial Parts and the DP complement. K is demonstrated by a genitive case marker, and the Axial Part (AxPart) is a lexical component which denotes the frames of reference. This analysis can also be used for the internal structure of Chinese spatial adpositions.

(2) *tamen* $_{Place}$[***zai*** [$_{KP}$[*fangzi* K/*de*] $_{AxPart}$[***houmian***]]   *xiuli*   *dianshiji*
     they   loc   house gen   back-side   repair   television
                 'They repair televisions behind their house'   (Adapted from Svenonius, 2007:70)

The PlaceP [*zai fangzi houmian*] 'behind the house' in the above example can be decomposed into a locative preposition *zai* 'loc', an AxPartP which dominates a KP and the AxPart *houmian* 'back-side'. Inside the KP, it is a null genitive case marker K/*de* and its DP complement fangzi 'house'. K can be either null as K or overt as *de*.

Paths adpositions are more complicated in Chinese. Like English, *cong* 'from', *dao* 'to' and null $_{TO}$ are also three elements in Chinese spatial adposition. Other than these, some path elements seem to be ambiguous between particle of the verb and a path preposition.

(3) *chuan*   *hua-*(**guo**)*   *qiao*   ***xia(mian)***
     boat   sail-pass   bridge   bottom
     'The boat sailed under the bridge'

In the example (3) above, the Axial Part *xia(mian)* 'bottom' itself cannot denote Path reading. Assuming *guo* 'pass' as a verb particle leads to the dilemma that both Path and Place are structurally null because the optionally directed verb *hua* 'sail' itself does not denote Path, either. I propose that *guo* 'pass' is based-generalized at the Path position and it later moves to the verb root *hua* 'sail' to form the verb *hua-guo* 'sail-pass'.

In conclusion, this paper provides a new analysis on the syntactic structure of spatial adpositions in Mandarin, as well as the properties of Paths and Place. It reveals a novel relation between P and N. as well as P and V, and it also contributes to the studies of Paths and Place.

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