The path of Mandarin Ps: from V to P (and back)

University of Toronto

Cristina Cuervo, Hong-Yan Liu

Some Mandarin prepositions have corresponding homophonous verbs. These prepositions, of which there are approximately 20, are called co-verbs in Li and Thompson (1981). Mandarin also has exclusive prepositions, which do not have verbal counterparts.

Among these 'ambiguous' Ps, there are three which exhibit a special behaviour, particularly in their distribution and position with respect to the verb: *zai* P=at; V=be at; *dao* P=to, V=arrive; *gei* P=for, V=give. Their peculiarities are apparent when we study their behaviour with respect to 'spatial' verbs classified into three categories: verbs of directed motion (*go, return*), verbs of non-directional motion (*fly, dance*), and stative verbs (no motion; *live, remain*) (Svenonius 2008).

Prepositional phrases in Mandarin overwhelmingly appear pre-verbally between the subject and the verb. Huang, Li and Li (2009:31) even propose an "independent requirement in Modern Chinese that within a clause, a preposition doesn't ever occur after a verb." Prepositions *dao*, *zai*, and gei, however, can appear post-verbally under certain conditions (Li and Thompson 1981, Paul 2015). Additionally, there are restrictions on the types of predicates these Ps can combine with. In particular, only *gei* can appear with active transitive predicates, while *zai* and *dao* can only do so if the direct object appears pre-verbally in the *ba*-construction. On the other hand, only *zai* can appear with stative (non-passive) predicates, and is incompatible with directed motion verbs.

Why do these three prepositions appear post-verbally? Paul (2015) argues that the post-verbal PPs function as arguments of the verb, whereas the PPs appear pre-verbally are adjuncts. But if these PPs are arguments, why are there restrictions in their combination with transitive or stative verbs?

We argue that these Ps, when post-verbal, are actually "incorporated" to the verb and form a verbal compound, on a par with other V-V compounds. This V-P compound takes the post-verbal DP as its complement. Building on Svenonius's (2008) analysis of spatial Ps, we propose that the P element contributes to building the event and licenses extra participants in a layered event configuration. *Zai* is analyzed as a PlaceP which licenses a Ground. *Dao*, which can appear with motion verbs but not with statives, corresponds to a PathP. Finally, *gei* licenses the indirect object in a DO—*gei*-IO construction, or it incorporates to the verb in a V-*gei* IO—DO construction. There are three indications that these P incorporate into the verb: a) they must appear adjacent to the verb, b) the aspectual marker –*le* affixes to P, 'closing off' the verb (as in *ban-dao-le* 'move-to-ASP'), and c) for *gei*, the indirect object DP appears immediately after the verb and before the direct object, an alternation reminiscent of the "dative alternation" in many languages. This pattern is compatible with an analysis of post-DO gei as Pathp, which licenses the direct object as Figure, and the IO is the Ground/intended location. In contrast, incorporated *gei* is an Applicative head which licenses the IO as Figure/recipient, and the DO as theme.

The analysis suggests how verbal meanings are built in the syntax, no matter whether the "verb" consists of a root with affixes, two forms that can appear independently from the other, or two roots. Ultimately the data and analysis point to a view of P and V as the roots of verbal meanings, and that there might be no internal, categorial syntactic difference between roots that become verbs and roots that become Ps, an idea compatible with works in various frameworks that have looked into V and P, such as Garret 1990, Hale & Keyser 2002, Neeleman 1997, Svenonius 2007, Wood & Marantz 2017, among others.

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