

‘Give’ and ‘take’ perspective of datives modulates structural priming

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Introduction One central question in structural priming is whether repetition of meaning is necessary for priming to occur or whether meaning makes an independent contribution to priming. Although research suggests that much structural priming is abstract and independent of meaning, there is evidence that features of meaning influence structure choice. For example, English speakers exhibited greater priming when primes and targets had the same thematic roles (Ziegler & Snedeker, 2018). Priming was also stronger when primes and targets had similar types of verbs (Messenger et al., 2012). The present study addresses the role of meaning in structural priming by examining whether a ‘give’ or ‘take’ perspective of a ditransitive event affects the magnitude of structural priming. A ditransitive event can be described from the standpoint of a giver (e.g., Sara gave a book to Ana) or a taker (e.g., Ana received a book from Sara). We investigated how the ‘give’ and ‘take’ perspectives in Mandarin datives influence Mandarin speakers’ structural choice in English datives.

Double-object (DO) and prepositional-object (PO) datives in English and Mandarin have similar syntactic structure. In DO, the direct object follows the indirect object. In PO, the direct object precedes the indirect object. Crucially, Mandarin and English datives have an important difference in terms of meaning. While English DOs only describe giving events, Mandarin DOs can describe both giving (1a) and taking events (1b) (Zhu, 1979). Mandarin POs only describe giving events. To see whether the perspectives in DOs affect structural priming, we examined Mandarin speakers’ structural choice in a cross-linguistic context.

Experiment Mandarin-English bilinguals (N=20) were asked to describe target pictures in English following a give-type (1a, 2a) or take-type (1b, 2b) prime in Mandarin. Each prime type was presented in DO in one condition (1a) and PO in the other condition (2a). If Mandarin-English bilinguals are sensitive to the ‘give’ or ‘take’ perspective of primes, we expect enhanced priming with perspective-consistent primes. Both Mandarin give-type DO and English DO sentences frame ditransitive events from the perspective of the giver. Thus, participants would be more likely to produce English DO sentences after exposure to Mandarin give-type DO primes than take-type DO primes. However, following Mandarin POs which describe give events only, the rate of English DO sentences should not differ.

Results We analyzed participants’ choices of datives (PO vs. DO) in English as a function of prime type (PO vs. DO) and perspective type (give vs. take) in Mandarin, using mixed logit models. Overall, participants produced more English DOs following Mandarin DO primes than PO primes (42.3% vs. 18.6%, $p < .01$). Crucially, we found that participants produced significantly more English DOs after give-type DO primes than take-type DO primes (49.2% vs. 35.3%). This can be seen in the significant interaction between prime and perspective ($p < .05$). The rates of DO responses following give-type and take-type PO primes were not different (17.9% vs. 19.3%).

Conclusion In sum, our results suggest that priming effects are larger when the perspective choices of target and prime are consistent. This suggests that perspective is a feature of meaning that plays an important role in structural priming although perspective-consistency is not necessary for priming to occur.

Sample stimuli:

(1) a. Mandarin give-type DO

Chushi song-le jiangjun yiben shu.
chef give-ASP general a book
'The chef gave the general a book.'

b. Mandarin take-type DO

Laoshi shou-le xuesheng yifeng xin.
teacher receive-ASP student a letter
'The teacher received a letter from the student.'

c. English DO

The assistant gave the boss a cup of coffee.
*The boss received the assistant a cup of coffee.

(2) a. Mandarin PO counterpart of (1a)

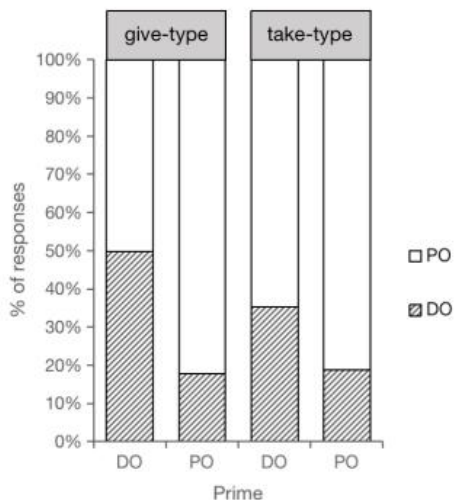
Chushi song-le yiben shu gei jiangjun.
chef give-ASP a book to general
'The chef gave a book to the general.'

b. Mandarin PO counterpart of (1b)

Laoshi shou-le yifeng xin gei xuesheng.
teacher receive-ASP a letter to student
'The teacher received a letter and gave it to the student.'

Figure:

The distribution of responses by syntactic structure and perspective type in Experiment.



References:

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