

## The Distributor *Dou* in Mandarin

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The analyses of mandarin *dou* are controversial. This functional morpheme has been interpreted as five different functions: a distributor ‘each’ (Lin 1998 and Wu 1999), a universal quantifier ‘every’ (Cheng 1995), a focus marker ‘even’ (Portner 2002), a sum operator (Huang 1996) and a maximality operator (Giannakidou and Cheng 2006 and Xiang 2008). This paper argues that the semantic core representation of *dou* is distributivity and its syntactic characteristics further support this analysis. The diversity of these analyses is due to two semantic interpretations of *dou*: the maximizing effect (a reading involving all individuals) and the minimizing effect (a reading involving every individual), which have been discussed in the literature (Huang 1996 and Xiang 2008). This paper proposes that analyzing *dou* as a distributor can account for both effects and its intrinsic semantic property of multiple events reading.

The distributive reading of *dou* shown in (1b) is one of the most discussed property of *dou*. The distinction between (1a) and (1b) shows that the appearance of *dou* is crucial. It is also point out that the distributive reading also operator on the event (Lin 1998 among others.). In (1b), for each person, there is a book such that each person bought a book; without *dou*, sentence (1a) has no distributive reading. As indicated by (1b), the distributive reading naturally implies multiple events which is an requirement for *dou* to be licensed. This paper argues that unavailable of distributive reading on event results in ungrammaticality and supports that distributive is the core semantic property of *dou*. (2) provides another evidence for distributive reading as the core meaning for *dou*. *Dou* needs to find either a plural NP or possible multiple event reading in the sentence. The reflexive ‘themselves’ restrict multi-event reading and thus it is not compatible with *dou*. Some analyses try to derive the distributive reading from other function, such as maximality operator, or try to attribute the distributivity to quantifiers (*mei* ‘every’ in Huang’s (1996) analysis) However, there analyses fail to predict the subject-object asymmetry in (3). In (3), the possible reading includes {Zhangsan met Xiaowang}, {Zhangsan met Xiaomei}, and {Zhangsan met (Wiaowang, Xiaomei)} and the same for Lisi; however, the reading {(Zhangsan, Lisi) met Xiaowang} and {(Zhangsan, Lisi) met Xiaomei} is unavailable. Both the analyses of sum operator and maximality operator will predict the later two reading to be possible. The distributivity analyses can predict this contradiction because a distributor can ‘distribute the property (the meeting event in (3)) to the individuals presupposed in the context (Zhangsan and Lisi in (3)).’ Based on these semantic observation on *dou*, it is reasonable to assume that *dou* is a functional head of Disributional Phrase (DistP) , as proposed by Wu (1999). As the head of DisP, *dou* sits between VP and AgrsP. Following Wu’s analysis, *dou*’s ability of quantifying over event can be attributed to its syntactic structure higher than VP.

This paper tries to evaluate the different analyses for *dou* from its semantic and syntactic properties and the requirement of multiple events is derived by interpreting *dou* as a distributor.

- (1a) tamen mai-le yi ben shu  
 they buy-ASP one CL movie  
 ‘They bought a book.’
- (1b) tamen dou mai-le yi ben shu  
 they dou buy-ASP one CL book.  
 ‘They each bought a book.’
- (2) \*zhe san xiongdi dou sha-le tamen-ziji de mama  
 this there brother dou kill-ASP they-self possessive mother
- (3) Zhangsan he Lisi dou jian-le Xiaowang he Xiaomei  
 Zhangsan and Lisi dou meet-ASP Xiaowang and Xiaomei  
 ‘Zhangsan met Xiaowang/ Xiaomei/ Xiaowang and Xiaomei.’  
 ‘Lisi met Xiaowang/ Xiaomei/ Xiaowang and Xiaomei.’  
 \* ‘Zhangsan and Lisi met Xiaowang/ Xiaomei/ Xiaowang and Xiaomei.’

#### Reference

- Beghelli, Filippo and Tim Stowell
- Cheng, Lisa L.-S. 1995. On Dou-quantification, *Journal of East Asian Linguistics* 4:197-234
- Huang, Shi-Zhe. 1996. *Quantification and predication in Mandarin Chinese: A case study of dou*. PhD dissertation, University of Pennsylvania.
- Giannakidou, Anastasia, and Cheng, Lisa L.-S. 2006. (In)definiteness, polarity, and the role of wh0morphology in free choice. *Journal of semantics* 23: 135-183.
- Lin, Jo-Wang. 1998. Distributivity in Chinese and its implications. *Natural Language Semantics* 6:201-243.
- Portner, Paul. 2002. Topicality and (non)specificity in Mandarin. *Journal of Semantics* 19:275-287.
- Wu Jiangxin. 1999. *Syntax and semantics of quantification in Chinese*. PhD dissertation, University of Maryland, College Park.
- Xiang, Ming. 2008. Plurality, maximality and scalar inferences: a case study of Mandarin dou. *Journal of East Asian Linguistics*. 17:227-245.