

陈丽萍 著

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「都」的形式语义研究

Distributivity, Scalarity,
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ABSTRACT

This dissertation investigates the semantic properties of the particle *dou* in Mandarin Chinese. It starts from the standard view among the Chinese linguistic community that *dou* is a particle that accompanies plural noun phrases and has a semantics somewhat similar (not identical) to the floated *all* in English and explores in some depth several phenomena that don't seem to fit into the picture.

There are five chapters in this book. Chapter 1 introduces the standard view of *dou* as a distributive operator as proposed in Lin (1998) and the empirical and theoretical arguments for the parallel treatment of *dou* and English *all*. Chapters 2 and 3 are devoted to two topics that are not covered in Lin's original work and that seem to pose problems for his analysis. Chapter 2 discusses what I call the *dou*-(dis)harmony phenomenon: *dou*'s (in)compatibility with certain quantifier phrases. This challenges the standard semantics of *dou* in that all of the quantifier noun phrases, *dou*-compatible or not, are presumably plural and thus should be compatible with *dou*, but certain quantifiers are not compatible with *dou*. Previous analyses approach this (dis)harmony effect from the perspective of the quantifier phrases, but I show that these approaches are not adequate for different reasons. I then argue that this problem is better solved from looking at the property of *dou*. In particular, I claim that *dou* carries an expectation-related

presupposition and it is the satisfaction or dissatisfaction of this presupposition that determines whether *dou* can be used or not in the context of quantifiers.

Chapter 3 investigates *dou* in a structure where plurality is not needed to license *dou*. Instead, focus is the crucial licensing factor. This is traditionally assumed to involve the *lian...dou/ye* ‘even...*dou*/also’ structure where it has a scalar reading similar to the meaning *even* has in English. Researchers disagree as to whether this *dou* should be assimilated to the distributive *dou* or should be treated separately. Through careful investigations into some rarely addressed properties of *dou* in this structure, I conclude in favor of the ambiguity view of *dou*. But it shares the context sensitivity of the distributive use of *dou* as developed in chapter 2. Finally, a compositional semantics for *lian...dou/ye* is provided based on the semantics of each individual particle.

Chapter 4 extends the discussion to *dou* in free choice structures: *dou* co-occurring with *renhe*-NPs “any” or *wh*-NPs yields a FC (free choice) reading, similar to the corresponding English sentences with FC *any*. In this chapter, I explore the two FC structures from the perspective of English FC *any* and *whatever* on the one hand and from that of our prior discussions of *dou* on the other. I argue that *renhe...dou* is like universal *any* but *wh...dou* is neither like universal *any* nor definite *whatever*. It is suggested that *dou* in the two FC structures, *renhe...dou* and *wh...dou*, is related to distributive *dou* and scalar *dou* respectively, in support of our claim that there are two related but distinct *dou*’s.

Chapter 5 provides some initial exploration of the interactions between *dou* and bare NPs. Chinese bare NPs are, basically, like

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English bare plurals displaying various readings in various contexts. This chapter examines the behavior of bare NPs in various contexts from the perspective of the two-*dou* account developed in the previous chapters. This investigation, though preliminary, provides further support for our claim that *dou* has a presupposition about the prior expectations on the part of the speaker and that the two *dou*'s need to be separated.

摘要

本书讨论汉语“都”的语义特点。理论语言学界通常认为“都”跟英语中用在动词前的“all”拥有一样的语义，二者都需要一个复数的名词。本文通过对与“都”有关的一些现象的深入分析发现情况并非如此。

全书分五章。第一章介绍林(1998)的观点：“都”是一个分解算子，并进一步提供了把“都”和“all”进行对等处理的理论和实证的依据。第二和第三章分别讨论两个林文没有涉及但似乎对他的理论提出挑战的问题。第二章讨论的是“‘都’的和谐”的问题，即“都”与量词词组的匹配问题。我们都知道，有些量词词组与“都”匹配，如“大部分人都来了”，有些则不匹配，如“*有些人都来了”。这一现象与第一章介绍的“都”作为分解算子的定义产生冲突，因为与“都”匹配和不匹配的量词词组都是复数的，所以在原则上都应该能与其匹配。前人对此问题的研究主要围绕着量词展开而没有涉及“都”的语义。本文试图从“都”的角度来解释这个问题，认为该问题的核心与“都”的预设有关。具体来说，“都”有着与说话者的预期相关的预设，“都”只有在其预设满足的情况下才能使用。

第三章讨论“都”在焦点结构中的特点。在这一结构中，“都”的允准条件不是复数，而是焦点。该结构通常叫做“连…都(也)”结构，具有与英语的“even”类似的量极意义(scalar reading)。学者对该“都”的语义持不同的态度。有的认为它与分解算子的“都”是一个，可以同样处理；有的认为应该把它与分解算子的“都”相区别。本文通过对一些学界还未曾认真

讨论过的问题的细致研究认为这两个“都”是不同的，应该分别处理。“连……都(也)”的量级语义也完全通过“连”和“都”或“连”和“也”各自的语义结合而来，而不是把它看成是整个句型的意义。

第四章讨论“都”在自由选择结构中的用法。“任何…都”或“疑问词…都”跟英语的“any”一样有自由选择的意义。本章一方面从英语的“any”和“whatever”的角度讨论汉语的上述两个含自由选择意义的结构，另一方面，又把这一讨论置于“都”的研究的框架下。结果证明，“任何……都”与全称量词“any”相似，但“疑问词…都”即不像全称量词“any”也不像定指的“whatever”。前者可以用表示“分解”的“都”来解释，后者可以用表示“量级”的“都”来解释，因而支持两个“都”的观点。

第五章是前几章的总结并对“都”和光杆名词的相互作用进行了初步的探讨。汉语的光杆名词基本上与英语的光杆复数名词一样在不同的环境中具有不同的意义。这一章从两个“都”的角度检查汉语光杆名词的特点。尽管对这一问题的讨论是初步的，探索性的，但是该讨论对“都”的预设作用和两个“都”的观点提供了进一步的佐证。

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CHAPTER 1

DISTRIBUTIVITY AND QUANTIFICATION

dou is a particle in Mandarin Chinese whose interesting distributions and interpretations have triggered a great deal of discussions in the field of Chinese linguistics both in traditional Chinese grammars and in recent linguistic literature. Traditional grammarians usually take *dou* as an adverb, an insight picked up and developed by Lee (1986) and Cheng (1995) who treat *dou* as an adverb of quantification. But many recent studies take it as the head of a functional projection (Shyu 1995, Lin 1996, Li 1997, and Wu 1999). Chiu (1990, 1993) argues that it is a floating quantifier, following the analysis of Sportiche (1988) for *tous* 'all' in French. Lin (1996, 1998) provides the first extensive and formal treatment of the semantics of *dou*. He proposes that *dou* is a distributive operator parallel to English floated *all*.

We will take Lin's (1998) account as the starting point for our own discussion of *dou* and explore in depth some phenomena that are not covered in Lin's original study and where *dou* seems to play a role that goes beyond its distributivity.¹ In examining an array of *dou*-hosting

¹ Other theories on *dou* are introduced when they are relevant to our discussions.

contexts from the more familiar domains of *dou*-(dis)harmony and *dou* in focus structures to the less familiar domains of *dou* in free choice structures and *dou*'s interaction with bare NPs, this dissertation hopes to bring out a clearer and better understanding of the semantics of the particle in the language to contribute cross-linguistic insights to various theoretical issues related to the various properties displayed in this lexical item.

In the rest of this chapter, I will focus on Lin's (1998) semantic account of *dou* and review proposals regarding the interaction of *dou* with quantifiers because they are crucial in subsequent discussions. Section 1.1 introduces the similarities and differences between *dou* and *all* and provides further empirical support for Lin's parallel analysis of *dou* with English *all* as a distributive operator. Section 1.2 introduces several analyses of *dou* in the context of quantifier phrases.

1.1 *dou* and *all*

1.1.1 The parallelism between *dou* and *all*

Dou is similar to *all*, a fact that shows up clearly in the context of definite plurals. For example, the sentence with *dou* in (1) is equivalent to (2) with *all* and both Chinese and English sentences have the interpretation in (3) with a universal quantification. In other words, semantically, *dou* and *all* in combination with a definite plural is like *every N*.

- (1) Naxie xuesheng dou qu jianshenfang le.

those student dou go gym ASP².

(2) Those students all went to the gym.

(3) Every student went to the gym.

All in (2) is often called the floated *all* as it is assumed to float from its pre-nominal position where it quantifies the NP, *those students*, as indicated in (4):

(4) All those students went to the gym.

To capture the universal reading of a plural definite, a common way to do it is to assume that there is a covert distributivity operator (D-operator) that has a universal force, as in (5).

(5) $D =_{df} \lambda P \lambda X \forall y [y \in X \rightarrow P(y)],$

where X is a variable over plural individuals and y a variable over singular atomic individuals.

The distributive operator takes a property denoted by VP and a plural individual denoted by NP and yields a true statement if every member denoted by the NP has the property denoted by the VP.

According to Link (1987), the floated *all*, can be

² In this book, we use ASP for aspect marker without distinguishing verbal *le* from sentential *le*, CL for classifier, and DE for nominal marker *de*.

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treated as an overt distributive operator operating on the VP. By taking *all* as the D-operator, the universal reading of (2) can be derived as in (6).

- (6) a. $\| \text{all} \| = \lambda P \lambda X \forall_y [y \in X \rightarrow P(y)]$
b. $\| \text{all VP} \| = \lambda X \forall_y [y \in X \rightarrow \text{go to the gym}'(y)]$
c. $\| \text{NP all VP} \| = \forall_y [y \in \text{those students}' \rightarrow \text{go to the gym}'(y)]$

(6a) means that *all* takes both VP and NP arguments and returns a statement that is true if every individual member denoted by the NP has the property denoted by the VP. (6b) combines *all* with VP first and yields a function from individuals to truth values. (6c) says for all *y*, *y* is a member of those students; *y* is true of the predicate *go to the gym*. This way, we get the universal reading of the sentence: every individual student went to the gym.

While (6) captures the meaning in (2), the example below in (7) shows that a sentence with a predicate such as *drew a picture* is ambiguous between a distributive reading and a collective reading:

- (7) The kids all drew a picture.
(i) Each of the kids drew a picture.
—distributive reading
(ii) The kids together drew a picture.
—collective reading