Intermediate Scope in (Mandarin) Chinese

This paper discusses the intermediate scope reading of two kinds of (Mandarin) Chinese indefinites—indefinites headed by a common noun and *wh*-indefinites (see Lin 1996 for discussion). The common-noun indefinites, like the English indefinites, show an intermediate scope reading only in the presence of a bound variable, and thus provide strong support for an analysis along the lines of Kratzer 1998, which singles out variable binding as one important source of intermediate reading, rather than to the *scope*-taking properties of the indefinites in question. The Chinese *wh*-indefinites, on the other hand, can receive an intermediate scope construal independently of the presence of a bound variable; I argue that they should be analyzed as denoting sets of alternatives, following Shimoyama 2001. This alternative approach to Chinese *wh*-indefinites explains their unusual "scope" properties as well as their argument-adjunct asymmetry with regard to island sensitivity.

Intermediate scope reading. Various proposals have been put forward (Reinhart 1997, Winter 1997, Kratzer 1998, i.a.) concerning the intermediate scope reading of indefinites, illustrated in the English example (from Abusch 1993-1994) as paraphrased below:

- (1) a. Every professor; rewarded every student who read a certain book s/he; had recommended.
 - b. For every professor x, there is a potentially different book that x recommended, the reading of which has led to rewarding every student who read that book.

Chinese // **English.** Chinese indefinites headed by a common noun pattern like English indefinites, in exhibiting a contrast which hinges on the presence of a *bound variable* (e.g., *ta* 's/he' below) in the restriction of the indefinite:

(2) mei-wei pinglunyuan dou kan-le *ta* xihuan de daoyanzhezuo de souyoudianying. every-CLcritic all see-PRF s/he like DE director make DE all movie 'Every critic saw all the movies that a (possibly different) director s/he likes made.'

Covert bound variables as well as overt ones count as a factor in the availability of an intermediate reading:

(3) mei-wei pinglunyuan dou kan-le bendi-de daoyan zhezuo de souyoudianying. every-CLcritic all see-PRF local-DE director make DE all movie 'Every critic saw all the movies that a (possibly different) local director made.'

Items such as *local* in the example above have been argued by Mitchell (1986) to involve an implicit bound variable in their construal, and therefore the intermediate scope reading in (3) can be analyzed on a par with the one in (2). These facts thus provide strong support for a choice function analysis of these indefinites à la Kratzer 1998.

Chinese *wh***-indefinites.** There exist, however, examples where an intermediate scope reading is available independently of the presence of a bound variable; these involve the Chinese *wh*-indefinites, as reported in Lin 2002, and illustrated below:

(4) haoxiang mei-yi-ben qikan dou jujue chuban liang-pian Chomksy han sheiyiqi he-xie de wenzhang seem every-1-CL journal all refuse publish 2-CL C. with whom together co-write DE article 'It seems that every journal has refused to publish two articles that Chomsky has co-written with (a potentially different) someone.'

Lin 2002 and Hu 2002, which analyze Chinese wh-indefinites using choice functions, wrongly predict that these indefinites will have more or less the same properties as the common-noun-indefinites. As shown in (4), the Chinese wh-indefinites exhibit intermediate scope reading even in the absence of a bound variable in their restriction, unlike the indefinites in Q-(3). This suggests the need for a different analysis for the wh-indefinites.

An alternative semantics for wh-indefinites. I claim that this class of indefinites in Mandarin must be analyzed on a par with the Japanese indeterminates discussed in Shimoyama 2001, i.e., as denoting sets of alternatives. On this approach, not only do the island-insensitivity of these items fall out, but so do their intermediate scope readings: the sister-constituent of an operator (universal, existential, or question) containing the wh-indefinite denotes a set of alternatives that provides the restriction for this operator; the numeral liang-ge 'two' in the example above does not qualify as such an operator, giving rise to the effect of the wh-indefinite having "scope" only under the distributive operator dou 'all'.

Just as Shimoyama 2001 shows for the Japanese counterparts of these items, these items are predicted under this analysis *not* to be sensitive to the presence of islands which otherwise bound movement (whether overt or covert).

Further implications. Chinese *wh*-indefinites pattern with their Japanese counterparts in their flexibility: they can be construed like existentially quantified phrases, as interrogatives, as polarity items, and like universally quantified phrases, depending on the operator they associate with (see Lin 1996 for an extensive discussion). This is the main property that Shimoyama's (2001) analysis targets, and thus follows for Chinese as it does for the Japanese indeterminates under her alternative semantics for these indefinites.

In addition, the alternative analysis also explains the much-discussed contrast between argument vs. adjunct *wh*-phrases in their sensitivity to islands (Huang 1982). I claim that this contrast follows from the fact that these two types of *wh*-phrases denote different things: while argument *wh*-phrases such as *shei* 'who', *shenme* 'what' and the like, denote sets of *alternative* entities (cf. Hu 2002), adjunct *wh*-phrases such as *WEIshenme* 'why' denote variables which rely on scope shift (either overt as in English, or covert as in Chinese) for their construal, and which are hence bounded by movement islands.

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