This paper presents new Chinese data suggesting that the Intervention Effects in why-questions are separate from other quantifier-induced Intervention Effects, and should receive a semantic explanation that hinges upon the idiosyncrasies of the why-adjunct. Recent literature in Chinese (Aoun & Li, 1991; Stepanov & Tsai, 2008; Cheng, 2009; Yang, 2012) proposes that Chinese Intervention Effects are a minimality effect (Rizzi, 2001), caused by wh-phrases moving across a quantifier at LF (1). As such, they don’t predict that, in why-questions, the patterns of intervention are sensitive to the types of quantifiers. I show in (2): (i) monotone decreasing quantifiers consistently induce Intervention Effects, in matrix & embedded why-questions (2a & 2d); (ii) monotone increasing quantifiers don’t induce Intervention Effects (2b); (iii) (increasing) modified numeral & (non-monotonic) bare numeral quantifiers induce weak intervention in matrix why-questions, which is ameliorated under embedded contexts (2c & 2d).

I propose to account for the full array of data by adopting a high attachment analysis of the why-adjunct, and by endorsing the view that topicality correlates with quantifier types. I assume with Rizzi (1990), Bromberger (1992) and Thornton (2008) that why doesn’t bind any traces/variables and favors high/late attachment during derivation. Specifically, I follow Ko’s (2005) proposal that the equivalents of why in East Asian languages (e.g. Chinese weishenme) merge directly at [Spec,CP], after all the non-why scopal elements have been merged at their scope positions below [Spec,CP]. In this view, in Chinese, if a scopal element takes wide scope over weishenme, it necessarily undergoes topicalization in overt syntax, from its scope position to the topic position, which is above [Spec,CP] (Krifka, 2001; Ko, 2005; Ebert et al., 2014). Consequently, if a quantifier is construed as topical and hence is able to undergo topicalization, it may scope above weishenme. On the other hand, if a quantifier cannot be construed as topical, outscoping would be impossible, and Chinese Intervention Effects arise in such cases, because for the non-topicalizable quantifier, the form [Topic Quantifier [Spec,CP weishenme]] is uninterpretable, hence semantically anomalous.

One prerequisite for generalized quantifiers to be topical is to express type-e (individual) meaning. Reinhart (1997) proposes that a class of generalized quantifiers express type-e meaning, by denoting a particular plurality individual set selected by a choice function (a witness set), rather than denoting a (Barwise-Cooper style) relation between predicates. Constant (2012) further specifies this class to include at least increasing quantifiers (including increasing modified numerals) and bare numerals. Constant’s evidence (e.g. these quantifiers may directly serve as contrastive topics; they may be one argument of an equative copular predicate, whose other argument is a regular plurality NP) is verified in Chinese (3).

Because decreasing quantifiers fail to express type-e meaning, (2a)’s Intervention Effects are explained. The absence of intervention for increasing quantifiers in (2b) also follows directly. (2c) follows from a separate pragmatic reason: (at least) five people can denote individuals, but under a neutral context it is hard to determine which particular individual set is being anchored. Krifka (2001) observes the same problem for the English example in (4): without additional contextual information, it is unclear which three boys are being picked out. Embedded questions offer the contexts to anchor a particular set (Szabolcsi, 2010), hence the amelioration in (2d).
Data

(1) A Relativized Minimality account (cf. Rizzi, 2001) of Intervention Effects in why-questions:

*([CP Quantifier weishenme]) surface syntax
*([CP [Spec,CP weishenme [C0 ... Quantifier ti]]) LF

(2) a. *{Meiyou ren / henshao ren} weishenme mei lai?
   *No person/few person why NEG come
   #‘For nobody/few people, why they didn’t come?’

b. Daduoshu ren weishenme mei lai?
   *Most person why NEG come
   ‘For a certain plurality set of individuals that is the majority of all the context-relevant individuals, why they didn’t come?’

c. ??{Zhishao wu-ge ren / wu-ge ren} weishenme mei lai?
   *{At least five-CLF person /five-CLF person} why NEG come
   ‘For a certain plurality set of individuals that is a subset of all the context-relevant individuals with the cardinality of (at least) five, why they didn’t come?’

d. Wo yijing zhidao {zhishao wu-ge ren / wu-ge ren / *henshaoren / *meiyouren} weishenme mei lai.
   I already know {at_least five-CLF person /five-CLF person/few person/no person} why NEG come
   ‘I already knew why {at least five people/five people/*few people/*nobody} didn’t come.’

(3) a. Contrastive Topic
   ---Yanjiusheng-men zhu zai na’er?
   *Graduate.student-PLURAL live LOC where?
   ‘Where do the grads live?’

   ---[Daduoshu/Wu-ge/*Henshao yanjiusheng]ct zhu zai [anhesite].
   *Most/five-CLF/*Few graduate.student live LOC Amherst
   ‘{Most of/five of/*Few of} the graduate students live at Amherst.’

b. Equatives (copular constructions that equate two individual-denoting expressions)
   [Zhan zai na’er de ren] shi [wo de xuesheng li de {daduoshu/wu-ge/*henshao}].
   *Stand LOC there REL person COP I REL student inside REL most/five-CLF/*few
   ‘Those standing over there are {most/five/*few} of my students.’

(4) ??Which dishes did three boys make?
   “Pick out three boys (out of a relevant set of boys), and tell me which dishes did they make?”
   (Krifka 2001: 8)
References


