

Contradiction, Why-question and Complex NP Islands in Chinese

Dawei Jin

State University of New York at Buffalo

daweijin@buffalo.edu

Chinese *in situ wh*-questions have been claimed to obey the complex NP constraint (Huang, 1982; Huang et al., 2009). One central issue in formulating this constraint is to guarantee that it applies selectively, because island sensitivity in Chinese depends on the choice of *wh*-phrases, illustrated by the contrast in (1-2). The standard approach to this selectivity is to posit that *wh*-phrases can be licensed by a non-movement mechanism, e.g. unselective binding (Pesetsky, 1987). Specifically, such licensing happens if *wh*-phrases range over individualized referential sets (Reinhart, 1998), or if they are morphologically transparent (Tsai, 1994). This predicts that *wh*-arguments, as well as adjuncts that take nominal *wh*-arguments (e.g. 2a), contrast with non-nominal *wh*-adverbials in terms of island behaviors (Fujii and Takata, 2007). However, this generalization is empirically problematic. Locative *wh*-adverbial is island-free (Cheng, 2009), just like *wh*-arguments/adjuncts. Judgments for degree/manner *wh*-adverbials can also be ameliorated, because readings can be found where they denote sets of degrees/manners (e.g. 2d; Bayer, 2006). Contrarily, (1) with reason *wh*-adverbial *weishenme* ‘why’ is never interpretable. It thus seems that the purported argument-adverbial asymmetry is only apparent. Below I present an alternative solution, which focuses on the idiosyncratic semantics of *why* (Bromberger, 1992).

Tsai (2008) proposes that *weishenme* takes the underlying event as its argument and functions as a sentential operator. On the other hand, the argumental reason-adjunct *yinweishenme* ‘because of what’ modifies the underlying predicate and functions as a derived predicate (i.e. behaves like VP-adverbials). I argue this denotation difference readily explains their divergent interactions with quantifiers, as in (3). Generalized quantifiers (e.g. *few*) operate on properties/predicates. Therefore they can only quantify over *yinweishenme* (e.g. 3a), whereas *weishenme* must take the entire quantified event as its argument (e.g. 3b). Crucially, I claim that the complex NP effects in (1) are due to semantic incoherence created by the compositional combination of *weishenme* and the relative clause that contains it.

Independently, when a *wh*-phrase is embedded in a relative clause, the interrogative force needs to propagate to the relative head noun. This is part of a broader requirement that applies whenever a *wh*-phrase is embedded in an attribute that modifies a head (Fiengo et al., 1988; Nishigauchi, 1990; Ginzburg and Sag, 2000). For example, in *picture of who*, if we assume that *who* ranges over a set of salient individuals, *picture* must range over a set of alternatives also, denoting picture sets that are owned by these individuals. This entails that a definite reading for *picture* is impossible. In all sentences containing *picture of who*, it can’t be the case that we know the referent of a particular picture from prior discourse and use the phrase to ask who is the owner of such picture.

The anti-definiteness effect in *wh*-relatives (Fiengo and Higginbotham, 1981) can also receive a semantic explanation, via the above fact. Chinese has no determiners, therefore a bare relative head is ambiguous between generic and definite readings (Simpson et al., 2011). In (4a), however, interrogative propagation requires the relative head to denote alternatives (thus indefinite). *Yinweishenme* ‘because of what’ refers to a set of reasons, which define a corresponding set of events caused by these reasons (e.g. book A was written because of reason r_1 , book B was written because of reason r_2 , etc.). The referents of the head noun are a set of entities participating in these events ($\{\text{book A, book B, etc.}\}$). A definite reading - in which the referents of books are known *a priori*, and in which the speaker asks for the reason causing that particular book-writing event - is not available. This anti-definiteness effect is also seen in (4b-c). Out of the three possible readings in (4b), only the definite one is ruled out. In (4c), a definite reading is forced via the presence of a demonstrative in the head noun, thereby causing oddness.

Since *weishenme* ranges over a set of possible reasons for an underlying event, the *wh*-relative in (1) denotes a set of propositions as the following: $\{\text{reason } r_1 \text{ CAUSES the event } e, \text{ reason } r_2 \text{ CAUSES the event } e, \dots\}$ (where e stands for an event of book-writing, and $R\{r_1, r_2, \dots\}$ are contextually salient reasons that might explain the occurrence of e). Crucially, all reasons take a common underlying event. These

propositions are statements about multiple possible reasons for the same event, not multiple events classified by different reasons. Therefore, regardless of which reason is the actual explanation for the book writing event, the same event remains unchanged, and so is the book, which is the participant of this unique event. Since the underlying event of *weishenme* is presupposed, the only possible reading is a definite one which asks for the reason, thus inducing a contradiction. Consequently, I show complex NP constraints in Chinese can be accommodated within the interpretational component of the grammar.

- (1) *Ni xihuan [ta weishenme xie] de shu?
You like he why write REL book (REL: relativizer)
 ‘Why_i do you like the book, which he wrote __i?’
- (2) a. Ni xihuan [ta yinwei shenme xie] de shu?
You like he because.of what write REL book
 ‘Which reason_i do you like the book(s) that he wrote for __i?’
 b. Guke jue ding mai [chushi zenme zuo] de nailao?
Customer decide buy cook how make REL cheese
 ‘How_i did the customer decide to buy the (type of) cheese that the cooks made __i?’
- (3) a. Henshao ren yinwei shenme cizhi?
Few people because.of what resign
 ‘What is the reason_i that few people have __i for resigning?’
 b. Weishenme henshao ren cizhi?
Why few people resign
 ‘Why few people resigned?’
- (4) a. Ni xihuan [ta yinwei shenme xie] de shu?
You like he because.of what write REL book
 i. ‘Which reason_i do you like (any) book(s) that he wrote for __i?’
 ii. *‘Which reason_i do you like that (particular) book, which he wrote for __i?’
 b. Zhangsan mai-le san-ben [shei xie] de shu?
Zhangsan buy-ASP three-CLF who write REL book (CLF: classifier ASP: aspectual marker)
 i. ‘Who_i did Zhangsan buy (any) three different books written by __i?’
 ii. ‘Who_i did Zhangsan buy (any) three identical books written by __i?’
 iii. *‘Who_i did Zhangsan buy the three books, which was written by __i?’
 c. *Ni xihuan [shei xie] de nei-ben shu?
You like who write REL DEM-CL book (DEM: demonstrative)
 ‘Who_i do you like that (particular) book, which was written by __i?’

References

- Bromberger, S. (1992). *On what we know we don't know*. University of Chicago Press.
- Fiengo, R., & Higginbotham, J. (1981). Opacity in NP. *Linguistic Analysis*, 7(4), 395-421.
- Fiengo, R., Huang, J., Lasnik, H., & Reinhart, T. (1988). The syntax of wh-in-situ. In *Proceedings of WCCFL 7*, 81-98.
- Fujii, T., & Takita, K. (2007). Wh-adverbials in-situ, their island-(in) sensitivity and the role of demonstratives in wh-in-situ licensing. *Nanzan Linguistics Special Issue*, 3, 107-126.
- Ginzburg, J. & Sag, I. (2000). *Interrogative Investigations*: CSLI.
- Huang, J. (1982). *Logical Relations in Chinese and the Theory of Grammar*. MIT dissertation.
- Huang, J., Li, A. & Li, Y. (2009). *Syntax of Chinese* Cambridge University Press.
- Ko, H. (2005). Syntax of why-in-situ. *NLLT* 23(4).
- Nishigauchi, D. (1990). *Quantification in the Theory of Grammar*. Kluwer Academic Publisher.
- Pesetsky, D. (1987) Unselective Binding. In *The representation of indefiniteness*.
- Reinhart, T. (1998). Wh-in-situ in the framework of the Minimalist Program. *NALS6*(1).
- Tsai, D. (2008) Left periphery and how-why alternations. *JEAL* 17(2).