Focus Intervention Effects are Not Related to LF Representations

Introduction: The present study argues for a revised condition on focus intervention effects occurs in Mandarin wh-questions, stating that it occurs iff an association between a focus particle and a focused constituent XP (F-XP association) intervenes between C[Q] and an in-situ wh-word, as in (1b-c), where shi ‘be’ and zhiyou ‘only’ are the focus particles associated with their focused constituents (underlined constituents). According to previous studies (Beck 1996, Beck & Kim 1997, Pesetsky 2000) intervention effects are related to LF representations. However, careful investigation of Mandarin data reveals that focus intervention effects cannot be related to LF representations.

(1) a. [C[Q] [ Libai xingqiyi mai shenme dongxi ]]? Libai Monday buy what thing
   ‘What does Libai buy on Monday?’

b. *[C[Q] [ Libai shi xingqiyi mai shenme dongxi]]? Libai be Monday buy what thing
   ‘What is the thing x such that it is on Monday that Libai buys x?’

c. *[C[Q] [ Libai zhiyou xingqiyi cai mai shenme dongxi ]]? Libai only Monday just buy what thing
   ‘What is the thing x such that Libai buys x only on Monday?’

Canceling contexts: Overt wh-fronting in Mandarin can cancel out focus intervention effects in (1b-c), as shown in (3a-b) respectively. In these sentences, the wh-words have been fronted across the F-XP associations, so the F-XP associations do not intervene between C[Q] and the fronted wh-words.

(3) a. [C[Q] [[Shenme dongxi]1 [ Libai shi xingqiyi qu mai t1]]]?
   what thing Libai be Monday go buy
   ‘What is the thing x such that it is on Monday that Libai is going to buy x?’

b. [C[Q] [Shenme dongxi]1 [ Libai zhiyou xingqiyi cai mai t1 ]]?
   what thing Libai only Monday just buy
   ‘What is the thing x such that Libai buys x only on Monday?’

Reconstruction: The fact that fronted wh-phrases consisting of anaphors and proper names behave in accordance with Binding Conditions A and C shows that the fronted wh-phrases are reconstructed at LF. (4a) establishes that Binding Condition A is operative in c-command, i.e. the subject Libai binds the reflexive taziji in the in-situ wh-phrases, so taziji cannot refers to another person; the same binding condition holds true of (4b), in which the proper names in the subject position can stil l serve as the antecedents of the reflexive taziji in the fronted wh-phrase. To fulfill Binding Condition A, the fronted wh-phrase must be reconstructed to its base-generated position at LF.

(4) a. Libai1 xingqiyi mai [ guanyu taziji1,*2 de shenme shu]? Libai Monday buy about himself DE what book
   ‘What book about himself does Libai buy on Monday’
b. [Guanyu tazijing1*2 de shenme shu], Libai1 
   shi/zhiyou xingqiyi cai mai?
   about himself DE what book Libai be only Monday just buy

   ‘What is the book about himself x such that {it is on Monday that/only on Monday} Libai buys x?’

(5a) establishes that Binding Condition C is operative in Mandarin, as evidenced by the fact that the pronoun which c-commands the proper name cannot be co-indexed with the proper name; (5b) shows that Binding Condition C also holds true of fronted wh-questions: the pronoun cannot be co-indexed with the proper name in the fronted wh-phrase. This further corroborates that reconstruction is operative in the fronted wh-questions.

(5) a. Ta1 xingqiyi mai [guanyu Libai*1/2 de shenme shu]?
   he Monday buy about Libai DE what book
   ‘What book about Libai does he buys on Monday?’

b. [Guanyu Libai*1/2 de shenme shu], ta1 
   shi/zhiyou xingqiyi cai mai?
   about Libai DE what book he be only Monday just buy

   ‘What is the book about Libai x such that {it is on Monday/only on Monday} Libai buys x?’

Focus intervention effects are not related to LF representations: After the fronted wh-phrases are reconstructed to their base-generated positions in (4b) and (5b) at LF, the LF representations of (4b) and (5b) are shown as (6a-b) respectively. In these two LF representations, the F-XP associations intervene between C[Q] and the wh-phrases. It means that focus intervention effects can be detected in the LF representations. If focus intervention effects are related to LF representations according to the previous literature, it should appear again and rule out the wh-fronting constructions in (4b) and (5b). The prediction is contrary to the fact. Thus, focus intervention effects cannot be related to LF representations.

(6) a. Libai1 shi/zhiyou xingqiyi mai [guanyu tazijing1*2 de shenme shu]?
   Libai be only Monday buy about himself DE what book

b. Ta1 shi/zhiyou xingqiyi mai [guanyu Libai*1/2 de shenme shu]?
   he be only Monday buy about Libai DE what book

Proposal: I propose that focus intervention effects are related to the Agree operation at Narrow Syntax. The syntactic mechanism triggering focus intervention effects is that C[Q] enters into the Agree relation with the intervening focused constituent XP rather than an in-situ wh-word. According to the previous studies (Culicover & Rochemont 1983, Horvath 1986, Rizzi 1997), a wh-word is the focus of a wh-question. It is reasonable to assume that a wh-word has not only an interpretable wh-feature but also an interpretable focus feature (F-feature). In addition, I propose that Mandarin C[Q] has an uninterpretable F-feature and an uninterpretable wh-feature, which must enter into the Agree relation with the interpretable F-feature and the interpretable wh-feature of an wh-word. When there is an focused constituent XP intervening between C[Q] and the wh-word, C[Q] wrongly enters into the Agree relation with the interpretable F-feature of the closer XP rather than the wh-word, as shown in (7). The uninterpretable wh-feature of C[Q] cannot be deleted through Agree.

(7) *[C[Q][FW],[wh-F] … focus particle XP[+F] … wh-word[+wh-F]] Agree

In (3a-b), the Agree operates successfully between C[Q] and the wh-word, since there is no intervening focused constituent. All the uninterpretable features of C[Q] have been deleted. Hence, there is no uninterpretable feature at LF. As a result, reconstructions at LF do not lead to the re-occurrence of focus intervention effects.