A Workspace-Based Approach to Tag Questions in Mandarin Chinese

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1 Introduction

Unlike tag questions in English, Chinese tag questions do not have the polarity relation with the main clause, and their forms vary. This study mainly focuses on the tag questions in A-not-A patterns, including *shì-not-shì* ‘be-not-be’, Adj-not-Adj, and Mod-not-Mod, and proposes that, generally, the tag question in Chinese is the matrix clause of the sentence, and the clause before the comma can be derived either by Internal Merge in a single workspaces or by detachment and remerge in separate workspaces. Moreover, empirical evidence for the workspace-involved approach in terms of freezing effect and scope will be presented.

2 Syntactic structure and derivation

2.1 A-not-A Tag questions derived by Internal Merge (Type A)

(1) \([\text{Top}_P \{\text{TopP} \{\text{CP} \text{ dāituó udā le nà gè qīgài} \text{ Top} \{\text{C-Q} \{\text{TP} \{\text{vP} \text{ shì-bù-shì} \text{ v-shì-bù-shì} \text{ shì-bù-shì}\} \text{ shì-bù-shì}\}}\}\}]]\]

‘Thugs beat up that beggar, didn’t they?’

In example (1), the *shì-bù-shì* ‘be-not-be’ undergoes a morphological process to form a head and be directly merged as the head of VP, and then be internally merged to the head of vP to become a transitive verb. The CP *dāituó udā le nà gè qīgài* ‘thugs beat up that beggar’ is merged as the complement of V head, and then undergo internal-merge to the Spec TopP. Hence, this CP precedes the matrix verb *shì-bù-shì* in linear order. Moreover, the C head occupied by the question morpheme Q provides the verb *shì-bù-shì* with an interrogative illocutionary force. Therefore, the tag question, for its own sake, is analyzed as the matrix clause of the sentence.
Nevertheless, in tag questions in the form of adj-not-adj, (2) instantiates that the AdjP duì-bù-duì ‘right-not-right’ functions as the matrix predicate, while the CP dàitú ouden-le nàgè qīgài ‘thugs beat up that beggar’ is directly merged to the Spec TP and serves as the matrix subject. Though this subject clause CP is situated at the beginning of the sentence and does not reveal overt movement according to the linear order, this study proposes that it still undergoes topicalization and is internally merged to the Spec TopP.

### 2.2 Evidence for the syntactic analysis of Type A

Firstly, according to Freezing Effect (see Ross 1967, Wexler & Culicover 1977, Rizzi 2006), once a constituent undergoes movement (i.e., internal merge), it will be frozen in place, and any element inside the constituent is unable to be extracted. (3a) contains two topicalizations: the CP dàitú ouden-le nàgè qīgài ‘thugs beat up that beggar’ undergoes topiclization and is internally merged to TopP1. Additionally, the DP nàgè qīgài ‘that beggar’ is topicalized to TopP2, and is thus moved out of a moved constituent (i.e., the CP at Spec Top1), which gives rise to Freezing Effect, resulting in the unacceptability. Analogously, the unacceptability of (3b) suggests it also contains two topicalizations: the CP undergoes internal-merge and is moved from TP to TopP1, leading to the Freezing Effect, which forbids the CP from being extracted.

(3) a. *[TopP] nàgè qīgài ne, [TopP] dàitú ouden-le nàgè qīgài], [CP] shìbùshì thug beat-up-ASP that CL beggar be-not-be
   [CP] dàitú ouden-le nàgè qīgài]], [CP] thug beat-up-ASP that CL beggar
   Intended: ‘For that beggar, thugs beat up him, didn’t they?’

b. *[TopP] nàgè qīgài ne, [TopP] dàitú ouden-le nàgè qīgài], [CP] dàitú thug beat-up-ASP that CL beggar
   ouden-le nàgè qīgài T T [AdjP duì-bù-duì]], [CP] thug beat-up-ASP that CL beggar right-not-right
   Intended: ‘For that beggar, thugs beat up him, right?’
Moreover, Chinese wh-words can have an indefinite construal when being licensed in NPI contexts. In (4b), shénme ‘what’ obtains an indefinite reading ‘some/any’ under the scope of shì-bù-shì. It can be observed in (4a), shénme can only have an interrogative reading, and thus the sentence can only be interpreted as a declarative sentence rather than as a question. The contrast on grammaticality shown in the minimal pair of (4a-b) reflects the licensing function of shì-bù-shì.

(4) a. *Xiǎohóng mǎi-le shénme cài. b. Xiǎohóng shì-bù-shì mǎi-le shénme cài. 
   Xiaohong buy-PERF what grocery Xiaohong be-not-be buy-PERF what grocery
   (‘Xiaohong bought some groceries.’) ‘Did Xiaohong buy any groceries?’

Importantly, for giving rise to the indefinite reading, either shénme or the copy left by shénme needs to be c-commanded by the licenser. Namely, the NPI, shénme in this case, is not necessarily to be fall under the scope of the licenser in the surface structure to receive the indefinite interpretation. In (5), though the CP Xiǎohóng mǎi-le shénme cài precedes shì-bù-shì ‘be-not-be’ at the surface, shénme can still have an indefinite reading, suggesting that there must be a copy left by shénme in the c-commanding domain of shì-bù-shì, which supports the proposal that the CP is moved from the complement of shì-bù-shì. Since under that circumstance, shì-bù-shì can still c-command and take scope over the copy of shénme, which ensures the indefinite reading of shénme.

   Xiaohong buy-PERF what grocery be-not-be
   ‘Xiaohong bought some groceries, didn’t she?’

2.3 Tag Questions derived in separated workspaces (Type B)

Contrastively, unlike the aforementioned structures, where the main predicates select a CP as its complement or subject, in Mod-ma or Mod-not-Mod patterns, the modal verb still serves as the main predicate of the sentence, and, however, only selects an IP as its complement. Based on Cinque (1999), Mood category also projects an independent functional projection, which occupies a specific position in the relatively fixed hierarchical structure in the IP domain. Taking the possibility Mood word kěnénɡ as an instance, supports for the selectional restriction of the Mood category can be found in (6).

(6) Jūshuō tāde dìdì déjiǎnɡ le, kě(nénɡ)-bù-kěnénɡ?
   allegedly 3sg-POSS younger.brother win.a.prize LE possible-not-possible
   ‘Allegedly, his/her younger brother won a prize. Is that possible?’

The tag question in (6) can only ask whether his/her younger brother won a prize is possible
or not, and the interrogative meaning cannot take scope over the adverbial じゃない‘allegedly’. To account for the phenomenon, we propose that じゃない‘allegedly’ is not generated in the complement of 可能 ‘possible’ but is merged with the IP after the IP is detached from its original position. The structure and the process of derivation is illustrated below.

(7)

Similar to the situation of other A-not-A patterns, 可能-bu-可能 undergoes a morphological process and form a complex Mood head, associated with the interrogative meaning. First, the IP 他的/her younger brother won a prize ‘his/her younger brother won a prize’ is detached from WS1 after it is merged with the Mood head. Second, this IP is further merged with other categories, such as Mod_evidentialP and CP, in another workspace (i.e., WS2), distinct from the one that the IP was originally generated (i.e., WS1). Third, the full-fledged CP is merged back to the Spec TopP in WS1.

2.4 Evidence for the syntactic analysis of Type B

Firstly, since the topic phrase TopP2, which is finally located at the Spec TopP1, is in fact generated in another workspace (i.e., WS2), it can be predicated that in WS2, the elements in the IP can be the target of topicalization due to that no movement/internal merge is involved in the previous derivation, waiving the constraint of freezing, contrary to the situation in (3). This predication is borne out, as in (8).

(8) 他 他的/her younger.brother ne, じゃない allegedly win.a.prize le, 可能-bu-可能? possible-not-possible

‘As for Xiaohong, she allegedly won a prize. Is that possible?’
The topicalization of 他的/她的弟弟 ‘his/her younger brother’ takes place in WS2, where the IP did not undergo any movement/internal merge, hence the legitimate structure. Furthermore, the Topic phrase TopP2 (generated in WS2), is then directly merged to the TopP1 in WS1, where the original IP only undergoes one internal merge. Therefore, the topicalized 他的/她的弟弟 is “smuggled”, preventing it from causing freezing effect.

Another piece of evidence is based on Pan (2015, 2019) that wh-words such as 什么 ‘what’ can add a strong negative assertion reading to a declarative sentence, and these words are located in the independent functional projection, i.e., NegQP (negative question projection), which is higher than the ordinary question projection iForceP. The question particle ma may cooccur with the negative wh-questions in some cases like (9).

(9) Shénme Lìsì ná-guò guànjūn, kēnéng ma?
what Lìsì take-ASP champion possible SFP
‘It is not true that Lisi won a champion before! Is it possible (that Lisi won a champion before?)’

In (9), though the negative wh-word 什么 ‘what’ and the question particle ma appear in the same sentence, neither of them takes scope over the other. Instead, both of them are construed as functioning on the assertion that Lìsì ná-guò guànjūn ‘Lisi won a champion before’. This phenomenon can be accounted for under the current proposal, as in (10).

(10)

The IP Lìsì ná-guò guànjūn ‘Lisi won a champion before’ is detached from WS1 after it is merged with the possibility Mood kēnéng. However, the copy left by this IP falls under the scope of question particle ma, hence the IP will be the target of questioning. In WS2, the IP falls under the scope of NegQP, leading to fact that this IP is also understood to be negated by 什么. Moreover, since the NegQP does not occur in the matrix clause, the potential semantic incongruent between the interaction between NegQP and interrogative iForceP will not be given rise to.
References


