The Structure of Split Questions in Mandarin Chinese

Ting-Chi Wei

National Kaohsiung Normal University

Abstract

This article proposes a *pro* analysis for split questions (SQs) in Chinese, dissimilar to the biclausal account employing focus movement and deletion in Arregi 2010 and the one employing the silent head in Kayne 2015 and Tang 2015. SQ consists of a *wh*-clause and a tag clause. We argue that the entire SQ is an information/confirmation-seeking question, represented by a Speech Act Phrase (SAP)-shell structure (Speas and Tenny 2003; Oguro 2017, etc.) with *wh*-clause in its specifier and the tag in its complement. The tag of Chinese SQ is a base-generated clause, [*pro* (copula) tag *ma/ne*], composed of an empty subject *pro*, an optional copula, a tag, and a final particle, instead of being derived from a fully-fledged structure parallel to the *wh*-part akin to those of English and Spanish SQs. Such a *pro* analysis overcomes difficulties encountered in the other accounts regarding the distribution of the final particles and their clause-typing, the optionality of the copula, the ubiquitous uses of tag, the connectivity effects, and the island-insensitivity. Analytically, two seeming variants of SQ imply that the derivation of an SQ depends on whether its tag moves and whether a copula exists.

Keywords

deletion, movement, speech act phrase, island effects, connectivity effects

1 Introduction

This article attempts to investigate the distribution and derivation of split questions (SQs) in Mandarin Chinese (hereafter, Chinese). An SQ, in general, consists of two parts: a *wh*-clause and a tag, sharing the same grammatical function and thematic role in (1). The tag is the correlate of the corresponding *wh*-word. In Chinese, the *wh*-part optionally ends with a constituent question marker *ne*, whereas the tag obligatorily ends with a yes-no question marker *ma* in (1a) or an alternative question marker *ne* in (1b). A copula *shi* ‘be’ can optionally appear in front of the tag.

- (1) a. Ta kanjian shenme (ne), (shi) mao ma?
 he saw what Q be cat Q
 ‘What did he see, a cat?’
 b. Lisi kanjian shenme (ne), (shi) mao haishi gou ne?
 Lisi saw what Q be cat or dog Q
 ‘What did Lisi see, a cat or a dog?’

In contrast, no particle and copula are existing in English SQ as in (2), first noticed by Bauerle (1979) and later explored from two main perspectives: (i) The monoclausal analysis embraced by Camacho’s (2002) and (ii) the biclausal analyses held by Arregi’s (2007, 2010) movement-and-deletion account and by Kayne’s (2015) and Tang’s (2015) silent head account.

- (2) a. What did John see, a cat?
 b. What did John see, a cat or a dog?

Since Arregi (2010) has argued against the monoclausal analysis, this article emphasizes the biclausal analysis.

This article proposes a *pro* analysis for Chinese SQ, which, however, differs from the biclausal analyses of Arregi (2010), Kayne (2015), and Tang (2015). We argue that the tag part is a base-generated clause, [*pro* (copula) tag *ma/ne*], which is not derived from a fully-fledged clause parallel to the first conjunct in structure. That is, Chinese SQ does not involve movement and deletion, in contrast with Arregi’s (2010) biclausal analysis for English and Spanish SQs. To capture the fact that the obligatory final particle after the tag dominates the clause-typing of the entire SQ, we propose that SQ is a conjunctive-like Speech Act Phrase (SAP)-shell structure relating to speech act layer (Speas and Tenny 2003), involving pragmatic roles, such as Speaker and Hearer, to express an information/confirmation-seeking question (Oguro 2017). This projection takes the *wh*-part as its specifier and the tag part as its complement. The final particle of the second conjunct undergoes clause typing at C to check the unspecified [*uQ*] feature and then raises with C to the highest SAP to fulfill the allocative probe-goal relation (Miyagawa 2012), typing the entire SQ as an information/confirmation-seeking question. Moreover, the empty subject *pro* connects the *wh*-part with the tag by referring to a disguised definite description of the previous event (Evans 1980), which contains an open

argument created by a *wh*-phrase. Further, (copula) tag as a predicate is predicated of the empty subject *pro*, completing its linkage with the *wh*-part. Under this *pro* analysis, properties of SQ in Chinese can be satisfactorily explained.

Finally, two variants of SQ are investigated to show that different types of fragment in natural speech may display different derivations. Deviating from the canonical SQ, the two variants of SQ involve two separate questions, which need to be answered independently. The result leads to an implication that the derivation of a fragment (tag) depends on whether it moves or not and whether a copula exists.

This article is organized as follows. Section 2 lays out the distribution of Chinese SQ. Section 3 surveys two potential analyses of SQ. Section 4 proposes a *pro* analysis. Section 5 discusses two seeming SQ variants. Section 6 concludes the article.

2 Distribution of Chinese SQ

2.1 Syntactic properties

An SQ is uttered by a speaker who raises a constituent question and, at the same time, provides a possible answer to that question to seek confirmation or information from the hearer(s). The entire SQ is to solicit answers or confirmation/information from the addressee. An SQ consists of two parts: a *wh*-question and a tag. Different from English and Spanish SQs (Arregi 2010), Chinese SQ makes use of final particles to type the entire SQ as an interrogative. First, the *wh*-part *optionally* ends with a constituent question marker *ne*, whereas the tag *obligatorily* ends with a yes-no question marker *ma* or a constituent question marker *ne* in the form of XP-*ma*/XP or YP *ne* as in (3) and (4), respectively. The tag is not only a potential answer to the correlative *wh*-word but also is a trigger of the clause-typing of the SQ (cf. Cheng 1991). In other words, the answer to an SQ ending with the yes-no question marker *ma* is initiated by *shide* ‘yes’ or *bushi* ‘no’ as in (3A) and (3A’), whereas the answer to an SQ ending with an alternative question marker *ne* has to be one of the alternative answers as in (4A), either *mao* ‘cat’ or *gou* ‘dog’.

- (3) Q: Ta kanjian shenme (ne), mao ma?
 he saw what Q cat Q
 ‘What did he see, a cat?’

A: Shide, ta kanjian mao.
 yes he saw cat
 ‘Yes, he saw a cat.’

A’: Bushi, ta kanjian gou.
 no he saw dog
 ‘No, he saw a dog.’

- (4) Q: Lisi kanjian shenme (ne), mao haishi gou ne?
 Lisi saw what Q cat or dog Q
 ‘What did Lisi see, a cat or a dog?’

- A: Mao/ Gou.
 cat dog
 'A cat/A dog.'

It is worthwhile to note that when the tag is the potential answer to the *wh*-part, the final particle is prohibited to end with the constituent question marker *ne* as in (5), except that the tag is an alternative question as in (4Q). The ungrammaticality is attributed to a semantic mismatch between the *wh*-part and the tag. Instead of providing a possible answer to the *wh*-part, the tag XP-*ne* here in Chinese, in fact, is commonly understood to inquire about the location of XP *mao* 'cat' or *Lisi* in (5).

- (5) a. *Ta kanjian shenme (ne), mao ne?
 he saw what Q cat Q
 '(lit.) What did he see, where is the cat?'
 b. *Shei kanjian mao (ne), Lisi ne?
 who saw cat Q Lisi Q
 '(lit.) Who saw the cat, where is Lisi?'

Second, in addition to the final particle *ma*, the tag can be preceded by a copula *shi* 'be' in (6). The optionality of *shi* 'be' plays a crucial role in identifying Chinese SQ.

- (6) a. Ta kanjian shenme (ne), (shi) mao ma?
 he saw what Q be cat Q
 'What did he see, is it a cat?'
 b. Shei kanjian mao (ne), (shi) Lisi haishi Mary ne?
 who saw cat Q be Lisi or Mary Q
 '(lit.) Who saw the cat, is it Lisi or Mary?'

Third, resembling Spanish and English SQs, Chinese SQ accommodates various types of tag, such as time adverb in (7a), adjunct in (7b), adjunct clause in (7c), and even verbal element (with negative) in (7d). It seems that SQs are ubiquitous concerning the syntactic category of the *wh*-phrase and of the tag.

- (7) a. Zhangsan shemeshihou qu Meiguo (ne), mingtian ma?
 Zhangsan when go U.S. Q tomorrow Q
 'When will Zhangsan go to the U.S., tomorrow?'
 b. Zhangsan dou zenme chuli ziji-de wenti (ne),
 Zhangsan all how deal.with self-DE problem Q
 xiaoxinyiyi-de ma?
 carefully-DE Q
 'How does Zhangsan always deal with his own problems, carefully?'
 c. Zhangsan weishenme shengqi (ne),
 Zhangsan why angry Q
 yinwei ni mei lai ma?
 because you have.not come Q
 'Why is Zhangsan angry, because you haven't come?'

- d. Lisi du-bu-du shu (ne),
 Lisi read-not-read book Q
 du (shu) ma/ bu du (shu) ma?
 read book Q not read book Q
 '(lit.) Whether Lisi read or not read books, read (books) or not read (books)?'

Thus far, there are at least two types of SQ in Chinese: (i) yes-no question, XP-*ma* SQ and (ii) alternative question XP or YP-*ne* SQ. SQ can be preceded by the copula *shi* 'be' and its tag can ubiquitously accommodate various syntactic categories.

2.2 Connectivity effects

Merchant (2004) argues that fragment answer (FA) in English has a non-fragmentary clausal structure, prior to TP-ellipsis. This view is validated from the fact that FA in English exhibits different kinds of grammatical dependency between the missing part and its correlate in the non-elliptical antecedent clause—the so-called connectivity effects in the sense of Morgan 1973. Below, we demonstrate that the tag of SQ in Chinese manifests the connectivity effects with their correlative *wh*-part in the respects of binding and quantifier binding. The parallelism indicates that there exists a full clause counterpart before the formation of the tag. Connectivity effects between the *wh*-part and the tag appear in Chinese SQs regarding binding theory and bound pronoun.

First, SQ observes Binding Principle A. The tag in the form of reflexive *ziji* 'himself' is co-indexed either with the matrix subject *Zhangsan* or with the embedded subject *Lisi* in (8a), just as its full-clause counterpart in (8b). The fact shows that both subjects c-command the tag in structure.

- (8) a. Zhangsan_j renwei Lisi_i zai piping shei, ziji_{i/j} ma?
 Zhangsan think Lisi PROG criticize who himself Q
 'Who does Zhangsan_j think that Lisi_i is criticizing, himself_{i/j}?'
 b. Zhangsan_j renwei Lisi_i zai piping ziji_{i/j} ma?
 Zhangsan think Lisi PROG criticize who Q
 'Does Zhangsan_j think that Lisi_i is criticizing himself_{i/j}?''

Second, Binding Principle B is also respected in Chinese SQs. The tag in the form of pronoun *ta* 'him' refers to the matrix subject *Zhangsan*, but not to the embedded subject *Lisi* in (9a), akin to the complete sentence in (9b). It indicates that the reference of a tag is affected by its correlative sentence.

- (9) a. Zhangsan_j renwei Lisi_i zai piping shei, ta_{j/*i} ma?
 Zhangsan think Lisi PROG criticize who him Q
 'Who does Zhangsan think Lisi is criticizing, him?'
 b. Zhangsan_j renwei Lisi_i zai piping ta_{j/*i} ma?
 Zhangsan think Lisi PROG criticize him Q
 'Does Zhangsan think Lisi is criticizing him?'

Third, Chinese SQs obey Binding Principle C as in (10a); it is impossible to co-index the r-expression tag *Zhangsan* with any potential c-commanding binders in the sentence, just like *Zhangsan* in its full-clause counterpart.

- (10) a. Ta_{j/*i} renwei Lisi zai piping shei, Zhangsan_i ma?
 he think Lisi PROG criticize who Zhangsan Q
 ‘Who does he_{j/*i} think Lisi is criticizing, Zhangsan_i?’
 b. Ta_{j/*i} renwei Lisi zai piping Zhangsan_i ma?
 he think Lisi PROG criticize Zhangsan Q
 ‘Does he_{j/*i} think Lisi is criticizing Zhangsan_i?’

Fourth, as to the bound pronoun, the pronoun *tade* ‘his’ in the tag is interpreted as if it is bound by the quantifier subject *meige ren* ‘everyone’ in the *wh*-part in (11a). The same quantifier binding also occurs in the full clause in (11b).

- (11) a. Meige ren_i dou guanxin shenme, tade_i quanli ma?
 every person all care what his right Q
 ‘What does everyone_i care about, his_i own right?’
 b. Meige ren_i dou guanxin tade_i quanli?
 every person all care his right
 ‘Does everyone_i care about his_i own right?’

The aforementioned discussions reveal that the fragmentary tag in a Chinese SQ behaves as the non-fragmentary *wh*-part with respect to the connectivity effects.

2.3 Locality effects

SQs in Chinese are insensitive to islands, different from Spanish or Basque SQs. Chinese is a *wh*-in-situ language without involving overt *wh*-movement (c.f. Huang 1982; Cheng 1991; Aoun and Li 1993; Tsai 1994, etc.). Therefore, unlike the overt *wh*-movement languages, such as English and Spanish, the *wh*-part of a Chinese SQ does not involve overt *wh*-movement and, therefore, does not violate island conditions. This means that the lack of overt *wh*-movement in the *wh*-part does not affect the diagnosis of whether or not the tag part undergoes movement. Namely, if an SQ within an island is felicitous, we can infer that no movement is involved in the source of the tag or that other mechanisms nullify the locality violation.¹

We observe that the tags whose *wh*-antecedents stay within islands are felicitous with respect to the complex NP constraints (CNPC) in (12a, b) and (13a, b), the sentential subject constraint (SSC) in (14a), and the adjunct condition (AC) in (15a), resembling the questions containing *wh*-words within islands as in

1 There is an argument-adjunct asymmetry regulating *wh*-elements appearing within islands in Chinese (Huang 1982). *Wh*-adjuncts such as *weishenme* ‘why’ and *zenme* ‘how’ cannot occur within islands. Therefore, checking tag questions involving *wh*-adjuncts is infelicitous.

(12a', b') and (13a', b'), (14b), and (15b) and the SQ exhibiting island-insensitivity in a non-island context as in (16).

(12) *Complex NP Constraint: complement clause*

- a. Ni tingdao [ta yong *shenme* da ren de yaoyan],
 you hear he use what hit person DE rumor
 (shi) shitou ma?
 be stone Q
 '(lit.) What have you heard rumors that he hit people with, stone?'
- a'. Ni tingdao [ta yong *shenme* da ren de yaoyan]?
 you hear he use what hit person DE rumor
 'What is x such that you heard the rumor that he used x to hit people?'
- b. Zhangsan xiangxin [Lisi kandao *shenme* de shuofa],
 Zhangsan believe Lisi saw what DE saying
 (shi) mao ma?
 be cat Q
 '(lit.) What does Zhangsan believe the saying that Lisi saw, a cat?'
- b'. Zhangsan xiangxin [Lisi kandao *shenme* de shuofa]?
 Zhangsan believe Lisi saw what DE saying
 'What is x such that Zhangsan believes the saying that Lisi saw x?'

(13) *Complex NP Constraint: relative clause*

- a. Zhangsan shou-le [*shei* song de liwu], (shi) Lisi ma?
 Zhangsan accept-LE who send DE gift be Lisi Q
 '(lit.) Who does Zhangsan accept the gift that sent, Lisi?'
- a'. Zhangsan shou-le [*shei* song de liwu]?
 Zhangsan accept-LE who send DE gift
 'Who is the person x such that Zhangsan accepts the gift that x sent?'
- b. Zhangsan xihuan [du *shenme* shu de ren],
 Zhangsan like read what book DE person
 (shi) zhentan xiaoshuo ma?
 be detective story Q
 '(lit.) What book does Zhangsan like the person who reads, detective stories?'
- b'. Zhangsan xihuan [du *shenme* shu de ren]?
 Zhangsan like read what book DE person
 'What is the book x such that Zhangsan likes the person who reads x?'

(14) *Subject Condition*

- a. Ni renwei [ta mai *shenme*] bijiao hao, (shi) shu ma?
 you think he buy what more good be book Q
 '(lit.) What do you think that for him to buy is better, books?'
- b. Ni renwei [ta mai *shenme*] bijiao hao?
 you think he buy what more good
 'What is the thing x such that you think that he buys x is better?'

(15) *Adjunct Condition*

- a. Ta [yinwei baba jian-le shei] cai shengqi, (shi) Lisi ma?
 he because father meet-LE who then angry be Lisi Q
 ‘(lit.) Who does he get angry because his father met, Lisi?’
- b. Ta [yinwei baba jian-le shei] cai shengqi?
 he because father meet-LE who then angry
 ‘Who is the person x such that he gets angry because his father met x?’

(16) *Embedded clause without island*

- Ni renwei [ta yong shenme da ren], (shi) shitou ma?
 you think he use what hit person be stone Q
 ‘(lit.) What do you think that he hit people with, stone?’

The island-insensitivity of SQs indicates that Chinese SQs do not seem to undergo movement or any kind of focus fronting, except that the island can be repaired through TP-ellipsis (cf. Merchant 2004) or that the tag is a base-generated structure.²

2.4 Interim summary

The SQs of Chinese exhibit the following syntactic properties: First, SQ in Chinese involves two parts: a *wh*-part and a tag. The former optionally ends with a constituent question marker *ne*, whereas the latter obligatorily with a yes-no question marker *ma* or a constituent (alternative) question marker *ne*. Second, the tag can be preceded by a copula verb *shi* ‘be’. Third, SQs in Chinese ubiquitously accommodate various syntactic categories of tag. Fourth, SQs display connectivity effects with respect to Binding Principles and bound pronoun. Fifth, SQs in Chinese are insensitive to islands.

3 Survey of two possible analyses

3.1 The silence head analysis

Kayne (2015) and Tang (2015) propose that the tag is not a head but an XP complement of a silent head. That is, a silent head exists between the *wh*-part and the tag in an SQ; in addition, either a yes-no question or a constituent question also has a silent F sandwiched between the clause and the final particle(s).

With such a silent head, the yes-no question and the constituent question are analyzed as a type of coordinating conjunction, as in (17a) and (17b), respectively (Tang 2015). In other words, the final marker *ma* and *ne* are no longer taken as

2 It is worthwhile to note that Arregi (personal communication) admits that Spanish SQ is island-sensitive and “cannot” be repaired by ellipsis, different from other elliptical structures, such as sluicing and fragment in that language. Whether island repair effect occurs in Chinese will be discussed in footnote 12.

final particles or even heads; they are maximal projections (XPs), functioning as the complements of the silent F heads.

- (17) a. [[ta kan shu] F [ma]]
 he read book MA
 ‘Does he read books?’
 b. [[ta kan shenme] F [ne]]
 he read what NE
 ‘What did he read?’

Interesting as it is, the analysis encounters several difficulties when dealing with SQs in Chinese. The first problem is concerned with the uncertain number of silent head. As illustrated in (18), given the coordinating structure prior to deletion, the first clause and the second clause have their own silent F_1 and F_3 , each of which conjoins the main clause with the complement clause containing a particle. Between them is another F_2 , connecting the first clause with the second clause. All these Fs are implicit coordinating conjunctions existing in an SQ; however, their semantic and syntactic properties are mysterious and unknown.

- (18) [[ta kanjian shenme] F_1 [(ne)], F_2 [(shi) [mao_{TP} ~~ta kanjian t_i]~~] F_3 [ma]]?
 he saw what Q be cat he saw Q
 ‘What did he see, a cat (he saw)?’

Second, this approach takes a final particle as an XP complement of a silence head. That is, each particle has its own independent semantic and syntactic interpretations. It is hard to explain why the second particle is obligatory, dominating the clause typing of SQ, whereas the first particle *ne* is optional. It seems that the analysis leaves the issue untouched.

Third, the optionality of the copula *shi* ‘be’ in front of the tag poses an analytical problem to such an account. Since Tang’s silent head analysis argues that silent head F encodes a coordinative relation, the copula *shi* might appear after F_2 as in (18). The analysis needs to explain why the copula is optional and why *shi* has to appear in front of the tag, not somewhere else.

3.2 A biclausal analysis: Arregi 2010

3.2.1 Licensing and identification

Arregi (2010) raises a convincing analysis for SQs, namely the biclausal analysis, which argues that the *wh*-part and the tag belong to two different sentences rather than to one sentence. The main points of this analysis are as follows.

The first sentence (*wh*-part) is a *wh*-question. In a *wh*-movement language like English, the *wh*-phrase is fronted to the specifier position of CP. At the same time, the tag as a remnant of ellipsis is derived by focus raising and TP deletion. Specifically, the focused constituent (tag) undergoes movement to the specifier of

CP, which is followed by TP ellipsis as illustrated in (19). Essentially, the tag is corresponding to the *wh*-phrase in grammatical function and thematic role. Arregi calls the tag “a correlate of the *wh*-phrase”.

$$(19) \text{ SQ: } [{}_{\text{CP}} \text{ } {}_{\text{wh-phrase}_i} \text{ } C_{{}_{\text{Q-WH}}} \dots t_i] [{}_{\text{CP}} \text{ tag}_j \text{ } C_Q \text{ } \overbrace{[{}_{\text{TP}} \dots t_j \dots]}^{\text{Tag}}]$$

$\underbrace{\hspace{15em}}_{\text{Wh-part}} \qquad \underbrace{\hspace{15em}}_{\text{Tag}}$

As to the grammatical functions of SQs, in addition to the *wh*-phrases in the object position in Spanish in (20a), Arregi argues that those in the subject and adjunct positions also can form SQs in (20b–d). The diversity implies that SQs accommodate various syntactic categories of *wh*-phrases and of the corresponding tags. That is, an SQ is characterized by two questions, posed by one speaker.

- (20) a. Qué árbol plantó Juan, un roble?
 what tree planted Juan, an oak
 ‘What tree did Juan plant, an oak?’
 b. Quién plantó el roble, Juan?
 who planted the oak Juan
 ‘Who planted the oak, Juan?’
 c. Cuando va Juan a Chicago, mañana?
 when goes Juan to Chicago, tomorrow
 ‘When is Juan going to Chicago, tomorrow?’
 d. Porque está Pedro enfadado, porque has hablado con Juan?
 why is Pedro angry because you.have talked with Juan
 ‘Why is Pedro angry, because you’ve talked with Juan?’

As mentioned, the tag undergoes focus fronting to the specifier of CP (Arregi 2010),³ prior to TP ellipsis. The TP ellipsis is not without constraint; it is licensed by a parallel antecedent.

In line with three licensing conditions in Rizzi 1986, Lobeck 1995, and Merchant 2001, Arregi (2010) proposes that the TP ellipsis occurring after focus raising should be licensed by two conditions.

First, focus raising is motivated by an uninterpretable [*u*Foc] feature which needs to be checked by a focus in the specifier of CP. Second, given Merchant 2001, TP ellipsis is implemented due to the existence of a [E] feature at C, which gives an instruction not to pronounce the TP complement of the C at PF. Thus, in addition to typing the tag by an interrogative [Q] feature, the generation of an SQ undergoes focus movement due to the uninterpretable [*u*Foc] feature and TP ellipsis due to the [E] feature in (21).

$$(21) [{}_{\text{CP}} \text{ XP}_{\text{F},j} \text{ } C_{\text{F},\text{Q},\text{E}} \text{ } \overbrace{[{}_{\text{TP}} \dots t_j \dots]}^{\text{Tag}}]$$

3 In Rizzi’s (1997) terminology, the focus is raised to the specifier of Foc.

Following Merchant (2001, 2004), Arregi further argues that the Focus condition in (22) can account for the semantic parallelism between the elided constituent and its correlate.

- (22) Focus condition on ellipsis
A constituent α can be deleted if α is e-GIVEN.

The notion of e-GIVENness relies on Schwarzschild's (1999) GIVENness in (23).

- (23) An expression E counts as e-GIVEN if E has a salient antecedent and, module $\exists$ -type shifting, A entails F-clo(E), and E entails F-clo(A).

According to Arregi (2010), ellipsis within an SQ is licensed in the following steps. Take (24a) for example. The structure of the first antecedent *wh*-part (A) is represented in (24b). The second clause (E) undergoes focus raising and deletion as in (24c).

- (24) a. Quién plantó el roble, Juan?
who planted the oak Juan
'Who planted the oak, Juan?'
b. A: [_{CP} who [_{TP} ^t_{who} planted the oak]]]
c. E: [_{CP} Juan_F [_{TP} ^t_{Juan} ~~planted the oak~~]]

The antecedent clause A' entails F-clo(E') as in (25) and the reverse entailment relation holds as well since E' also entails F-clo(A') in (26). The mutual entailment between the antecedent clause and clause containing the tag makes the target TP become an e-GIVEN expression according to (23). In that sense, the focus condition (22) is satisfied and allows the TP deletion in (24c).

- (25) a. A' = $\exists x$ [x planted the oak]
b. F-clo(E') = $\exists x$ [x planted the oak]
(26) a. E' = $\exists x$ [x planted the oak]
b. F-clo(A') = $\exists x$ [x planted the oak]

3.2.2 Not a feasible analysis

We will demonstrate that though the biclausal analysis proposed by Arregi (2010) can be manipulated to explicate some properties of Chinese SQ, it encounters difficulties in explaining the optionality of copula and in presenting evidence for focus movement.

Chinese is a *wh*-in-situ language; the *wh*-phrase stays in its base-generated position with an optional *wh*-question marker *ne*, typing the clause with OP_{WH} in (27). The second sentence is the remnant of TP ellipsis, in which a focused constituent (tag) is attracted by an uninterpretable [*u*Foc] feature to the specifier of

FP.⁴ After the [E] feature is checked, TP ellipsis is applied. The second particle *ma* or *ne* is required to type the clause with OP_Q as a yes-no question or an alternative question. The tag question should dominate or override the clause type of the entire SQ. That is why the particle of the second question is obligatory and determines the content of the answer and why the particle of the first question is optional and only responsible for typing the *wh*-part. To interpret this fact, we may assume that if a complex clause or a conjoined structure contains more than one particle for clause-typing, it is the “final” particle that determines the type of the entire clause or structure.

- (27) SQ: [_{CP} OP_{WH} ...*wh*-phrase... (*ne*)], [_{CP} OP_Q [_{FP} tag_j F_[#FOC, E] [_{TP} ... t_j ...]] *ma/ne*]
Wh-part *Tag*

The implementation of (27) is illustrated in (28a, b). The tags, *mao* ‘cat’ and *mao haishi gou* ‘cat or dog’, are raised to the SpecFP to check the uninterpretable [*uFoc*] feature on F. After checking, [E] feature is eligible to license the TP deletion, leaving the tag and the final particle behind, as desired.

- (28) a. [_{CP} OP Ta kanjian shenme (ne)], [_{CP} OP_Q [_{FP} mao_j F_[nFOC, E]
 he saw what Q cat
 [_{TP} ta kanjian t_j]] ma]?
 he saw Q
 ‘What did he see, a cat?’
 b. [_{CP} OP Lisi kanjian shenme (ne)], [_{CP} OP_Q
 Lisi saw what Q
 [_{FP} [mao haishi gou]_j F_[nFOC, E] [_{TP} ta kanjian t_j]] ne]?
 cat or dog he saw Q
 ‘What did Lisi see, a cat or a dog?’

At this stage, one may be skeptical of the validity of (28), wondering why the tag question dominates or overrides the clause type of the entire SQ in Chinese, in particular when the second particle is located at the end of the second clause, which is not in a position hierarchically dominating the final particle of the first clause. More problems arise with respect to the position of the copula, lack of empirical evidence for focus movement, and some theoretical concerns.

The emergence of the copula *shi* ‘be’ poses an analytical problem to the biclausal analysis. In Chinese SQ, the copula may be taken as a realization of focus marker (Foc) under the biclausal analysis. However, as can be seen in (29), the tag is in the specifier of Foc. If *shi* ‘be’ is a realization of Foc, the predicted sequence should be tag-copula, as opposed to the correct sequence copula-tag as repeated in (29). One of the reviewers suggests that *shi* ‘be’ could be required to undergo

4 Arregi moves tag to SpecCP instead of SpecFP. In Chinese, SpecCP is a position for *wh*-operator, which checks with C to type the clause (Cheng 1991; Tsai 1994, etc.). That is, CP is split into CP and FP

further head movement obligatorily to derive the correct word order, copula-tag, just like the analysis of *ba*-construction, which has to undergo an additional head-movement step, as released in Li 2017. Other things being equal, we think that the extra head movement is costly, and the mechanism needs justification.⁵

- (29) Ta kanjian shenme (ne), (shi) mao ma?
 he saw what Q be cat Q
 ‘What did he see, is it a cat?’

Moreover, the copula may be a residue of a cleft structure in the second tag clause. The possibility leads to the assumption that the (copula)-tag is derived from an unpronounced cleft structure through focus-fronting and deletion, as shown below. However, this line of thought violates a general rule of cleaving in Chinese [...*shi*...(de)] structure. In (30a), the object *mao* ‘cat’ cannot be cleft with a marker *shi* ‘be’ in Chinese as in (30b), contrary to the eligible examples of the cleft subject and verb phrase in (30c).

- (30) a. Ta kanjian mao.
 he saw cat
 ‘He saw a cat.’
 b. *Ta kanjian shi mao (de).
 he saw be cat DE
 ‘(lit.) It is a cat that he saw.’
 c. (Shi) ta (shi) kanjian mao (de).
 be he be saw cat DE
 ‘It is he who saw a cat.’
 ‘(lit.) It is saw a cat that he did.’

The above observation is opposed to the fact that the tag can be freely raised from the grammatical object position in SQs. That is, SQ is not derived from a structure containing cleft in (31).

- (31) a. *Ta kanjian shenme (ne), [ta kanjian shi mao (de)] ma?
 he saw what Q he saw be cat DE Q
 ‘What did he see, is it a cat that he saw?’
 b. *Ta kanjian shenme (ne), [ta kanjian shi [mao haishi gou]
 he saw what Q he saw be cat or dog
 (de)] ne?
 DE Q
 ‘What did he see, is it a cat or a dog that he saw?’

In addition to clefts, one may be tempted to correlate Chinese SQs with pseudoclefts, mostly because of the similar occurrence of *shi* ‘be’ within [...*de*...*shi*...] structure. The pseudocleft analysis of SQ also faces several difficulties. For one

5 The costly raising will be addressed below.

thing, according to Huang (1988), ‘identification’ *shi* ‘be’ in Chinese pseudocleft [...*de*...*shi*...] structures cannot be omitted as in (32). This characteristic is contrary to that of SQ, which copula *shi* ‘be’ is prevalently optional in front of the tag.

- (32) Ta kanjian *de* (dongxi) *(shi) mao.
 he saw DE thing be cat
 ‘What he saw is a cat.’

A pseudocleft analysis would have to explain why the heads of relative clauses encoding time, location, reason, and so on occur only in the second conjunct, but not in the first conjunct, prior to deletion, as in (33).

- (33) Ta kanjian shenme (ne), [[ta kanjian *de* (dongxi)]
 he saw what Q he saw DE thing
 (*shi*) mao] ma?
 be cat Q
 ‘What did he see, is what he saw a cat?’

This empirical fact poses a problem to the syntactic parallelism required by deletion analyses, for it is impossible to find the corresponding relative head *dongxi* ‘thing’ in the first clause. The mismatch deteriorates the pseudocleft analysis.

To strengthen our argument against focus movement analysis, we should check if [cleft *shi*-object focus] can be fronted to the left periphery of the sentence prior to TP deletion, as in (34).

- (34) *Ta kanjian shenme (ne), [shi mao [_{TP} ~~ta kanjian le~~] ma?
 he saw what Q be cat he saw LE Q
 ‘What did he see, is it a cat that he saw?’

We think that this option cannot account for the properties of an SQ and would not challenge the present *pro* analysis for two reasons. In the beginning, the derivation of copula-tag sequence, motivated by further head movement, is costly and pending for more evidence. This line of thought can be traced back to Cheung’s (2014) *wh*-fronting construction, which is derived through raising focus *shi* ‘be’ and identification focus as follows.

- (35) (Shi) shei, ta kanjian le?
 SHI who he saw LE

- (36) [_{FP} [_F F [_{FocP} IdentF_K [_{Foc} t_j [_{IP} ...t_j...t_k...]]]]]
 shi_j shei_k ta kanjian t_k le

The focus is raised from within IP to Foc head to be licensed as a focus marker. Cheung (2014) argues that the focus is lexicalized as *shi* ‘be’ in the process of movement. Afterwards, the *wh*-movement from within IP to SpecFocP is motivated to license the *wh*-word as an IdentF through spec-head agreement. To derive the correct word order, the *wh*-word stays in situ but *shi* ‘be’ is further raised to the

head of a higher FP; the raising is triggered by the requirement that *shi* has to c-command its associated IdentF. One may wonder if the analysis of *wh*-fronting can be applied to that of SQ.

After scrutiny, several problems arise. First, the categorial status of F is unknown, as Cheung admitted. Second, the motivation of head movement to F is argued to license its associated IdentF; such a movement to F is argued to meet another IdentF c-commanding requirement. However, IdentF has already been licensed with *shi* through spec-head agreement at Foc. The redundant licensing needs more refinements. Third, the structure in (36) is a cleft-like structure involving exhaustivity identification on IdentF, which specifies an exhaustive set among the contextually relevant entities for which a given proposition holds true and excludes other possibilities (É. Kiss 1998). We are not sure if the information/confirmation-seeking question of the second clause in an SQ meets the exhaustivity requirement.

Another weakness of the biclausal analysis is the lack of evidence for focus movement. The tags are felicitous when its *wh*-antecedents are located within islands. That is, Chinese SQs do not respect locality effects, contrary to Spanish and English SQs (Arregi 2010). The phenomenon implies that the tag may not undergo any movement prior to deletion. For instance, the tags whose *wh*-antecedents stay within islands are insensitive to islands such as the CNPC in (12–13), the SSC in (14a), and the AC in (15a), as partially repeated below. The island-insensitivity of Chinese SQ is dissimilar to the island-sensitivity of English and Spanish SQs.⁶

6 One of the reviewers wonders if the islands can be repaired in Chinese SQ; if the answer is positive, then the island-insensitivity of SQ does not constitute evidence for a non-movement analysis. The issue of island repair effect has been a mysterious issue not only in Chinese but in the other languages. We agree with the reviewer that the ability for deletion to repair islands varies from one language to another and even from one construction to another within a language. In the original manuscript, we cited Wei's (2016) work on fragment answer (FA) in Chinese, which suggests that FA in Chinese involves focus movement and deletion. FA in Chinese is "insensitive" to islands as in (i). Given Merchant's (2004) analysis, Wei (2016) proposes that the FA *Lisi* in (i) undergoes focus raising to the SpecFocP to check with the [E [uFoc*]] feature on Foc. TP ellipsis erases the offensive *-traces induced by the focus raising from embedded CP to the SpecFocP.

(i) A: Ta zhaodao [[*shei* zui ai] de bi] (ne)?
 he find who most like DE pen Q
 'Who is the person x such that he found the pen that x likes most?'

B: [_{FocP} Lisi₂ [_{Foc'} F [_{E[uFoc*]]} [_{TP} ~~ta~~ ~~zhaodao~~ [_{CP} [_{DP} ~~*t₂~~ ~~zui ai de~~ bi]]]]]
 Lisi he find most like DE pen

Meanwhile, Wei (2018) argues that fragment question (FQ) involving topic movement and TP deletion is subject to island constraints and is unable to be repaired by TP deletion. Islands such as CNPC and the adjunct island cannot be repaired as in (ii). So the two strong islands are regarded as evidence for topic movement.

(ii) A: Ta zhaodao [[*mama* zui ai] de bi].
 he find mother most like DE pen
 'He found the pen that his mother likes most.'

(13) *Complex NP Constraint: relative clause*

- a. Zhangsan shou-le [*shei* song de liwu], (shi) Lisi ma?
 Zhangsan accept-LE who send DE gift be Lisi Q
 ‘(lit.) Who does Zhangsan accept the gift that sent, Lisi?’
- b. Zhangsan xihuan [du shenme shu de ren],
 Zhangsan like read what book DE person
 (shi) zhentan xiaoshuo ma?
 be detective story Q
 ‘(lit.) What book does Zhangsan like the person who reads, detective stories?’

All these empirical facts cast doubt on the focus movement analysis held by the biclausal view.

4 Our proposal: A *pro* analysis

This section proposes an analysis without involving any focus movement and deletion, deviating from Arregi’s version for English and Spanish SQs. The major motivation of this analysis lies in two factors: (i) the existence of an optional copula *shi* ‘be’ in front of the tag and (ii) the lack of evidence for movement.

4.1 Base-generated structure

In light of the split CP hypothesis (cf. van Craenenbroeck 2004), we adopt Tang’s (1989: 539–540) Chinese CP structure in (37) to fit the SQ structure. Tang (1989) argues that CP in Chinese is a left-branching structure with C_1 of CP_1 and C_2 of CP_2 on the right in (37), mainly because each final particle is recognized as a head of a projection (cf. Rizzi 1997; Tang 2010).

$$(37) [_{CP_1} wh\text{-item} [_{C_1} [_{CP_2} [_{C_2} [_{TP} \dots] C_2]] C_1]]$$

We further propose that the second clause which contains tag is a base-generated clause, [*pro* (copula) XP *ma*] or [*pro* (copula) XP or YP *ne*], as illustrated in (38). To capture the fact that the obligatory final particle after the tag dominates the clause-typing of the entire SQ, we propose that SQ is a conjunctive-like SAP-shell structure relating to speech act layer (Speas and Tenny 2003), involving pragmatic roles Speaker and Hearer to express an information/confirmation-seeking question (Oguro 2017). This projection takes the *wh*-part as its specifier and the tag part as

$$\begin{array}{ccccccc} \text{B: } *Baba & \text{[}_{TP} & ta & \text{[}_{vP} & *t'_{baba} & \text{[}_{vP} & zhao\text{dao} & \text{[}_{DP} & \text{[}_{CP} & \text{[}_{TP} & *t_{baba} & zui\text{-ai} & \text{de} & bi]]]] & ne? \\ \text{father} & & \text{he} & & & & \text{find} & & & & & & \text{most like} & \text{DE} & \text{pen Q} \\ \text{'What about his father?'} & & & & & & & & & & & & & & \end{array}$$

Thus far, we have to admit that the dispute over the existence of island repair effect is still an unsettled issue. Linguists like Ross (1969) and Merchant (2001, 2004) admit that deletion can ameliorate islands, whereas Barros et al. (2014) and Abels (2011) argue against the substantial effect of island repair. At present, we can only capture the fact that FA in Chinese undergoes island repair, while FQ does not. Accordingly, island insensitivity of SQ cannot be deemed as a substantial support to the existence of island repair effect in focus movement analysis.

its complement. The final particle of the second conjunct undergoes clause typing at C to check the unspecified [μ Q] feature and then raises with C to the highest SAP to fulfill the allocative probe-goal relation (Miyagawa 2012), typing the entire SQ as an information/confirmation-seeking question. Moreover, the empty subject *pro* connects the *wh*-part with the tag through referring to a disguised definite description of the previous event (Evans 1980) which contains an open argument created by a *wh*-phrase. Further, (copula) tag as a predicate is predicated of the empty subject *pro*, connecting with the *wh*-part.

- (38) a. SQ: [_{SAP} [_{CP} OP_{WH} ...*wh*-phrase... (*ne*)], (*Wh*-part)
 [_{SA'} [_{CP} OP_Q [_{TP} *pro* (copula) XP] t_i] SA+*ma*_[μ Q]]] (Tag)
 b. SQ: [_{SAP} [_{CP} OP_{WH} ...*wh*-phrase... (*ne*)], (*Wh*-part)
 [_{SA'} [_{CP} OP_Q [_{TP} *pro* (copula) XP or YP] t_i] SA+*ne*_[μ Q]]] (Tag)

To refine this line of thought, we would try to address our analysis as follows: *pro* construal in Section 4.2, the status of the copula in Section 4.3, and SAP, pragmatic roles, and probe-goal relation based on Speas and Tenny 2003, Oguro 2017, and Miyagawa 2012 in Section 4.4.

4.2 Construal of subject *pro*: Predication

Chinese is a *pro*-drop language (Huang 1982); therefore, the subject *pro* is prevalently used to refer to its antecedent(s) in the same sentence, out of the sentence, or in the context/discourse. In Chinese SQ, we argue that the tag clause is independently derived, adhering to the *pro*-drop parameter.

First of all, the empty subject is a covert pronominal subject *pro*, which refers to a disguised definite description (Evans 1980). More specifically, the *pro* in Chinese SQ is an E-type *pro*, based on Evans' (1980) donkey pronoun analysis. An E-type pronoun is not a bound variable but is a disguised definite description because the indefinite antecedents in donkey sentences such as (39a)—a man and a donkey—do not bind the E-type pronouns, *he* and *it*, both of which can be paraphrased as definite descriptions as in (39b).

- (39) a. If a man owns a donkey, he always beats it.
 b. If a man owns a donkey, the man who owns the donkey always beats the donkey which the man owns.

From such a view, the *pros* in (40–41) will be interpreted as the thing that he saw in (40) and peripheral arguments such as the time that he goes to the U.S. in (41a), the manner that he deals with the matter in (41b), the reason why *Zhangsan* is angry in (41c), and whether *Lisi* read or not in (41d). Other potential peripheral arguments including location, instrument, and so on are permissible. A priori, the diversity of the reference of *pro* explains the ubiquitous use of Chinese SQs. Thus, the *pro* in the tag clause can be taken as an event *pro*, referring to a definite description in the first *wh*-part. It acts like deep anaphora in the sense of Hankamer and Sag 1976.

- (40) a. Ta kanjian shenme (ne), [pro (shi) mao ma]?
 he saw what Q be cat Q
 ‘What did he see, a cat?’
 b. Lisi kanjian shenme (ne), [pro (shi) mao haishi gou ne]?
 Lisi saw what Q be cat or dog Q
 ‘What did Lisi see, a cat or a dog?’
- (41) a. Zhangsan shemeshihou qu Meiguo (ne),
 Zhangsan when go U.S. Q
 [pro (shi) mingtian ma]?
 be tomorrow Q
 ‘When will Zhangsan go to the U.S., tomorrow?’
 b. Zhangsan dou zenme chuli ziji-de wenti (ne),
 Zhangsan all how deal.with self-DE problem Q
 [pro (shi) xiaoxinyiyi-de ma]?
 be carefully-DE Q
 ‘How does Zhangsan always deal with his own problems, carefully?’
 c. Zhangsan weishenme shengqi (ne),
 Zhangsan why angry Q
 [pro (shi) yinwei ni mei lai ma]?
 be because you have.not come Q
 ‘Why is Zhangsan angry, because you haven’t come?’
 d. Lisi du-bu-du shu (ne),
 Lisi read-not-read book Q
 [pro (shi) du (shu) ma/ (shi) bu du (shu) ma]?
 be read book Q be not read book Q
 ‘(lit.) Whether Lisi read or not read books, read (books) or not read (books)?’

Second, the construal of the event *pro* with a definite description is not at random. It refers to an open argument created by its correlative *wh*-phrase. Namely, the *wh*-part clause can be interpreted as a lambda-abstracted expression containing one free variable or one unsaturated argument. The lambda expression λx (... *x*...) denotes the set of {*x*} such that “... *x*...” is true. From the point of view of predication (Williams 1980), any element that fits such a definite description is recognized as the semantic subject of the predicate. In this sense, in an SQ, the *wh*-part serves as a predicate with an open argument, either canonical or peripheral one, represented by a *wh*-word in the form of a variable *x* at LF bound by a lambda operator. The tag can be said to be a potential answer to the *wh*-word; that is, it is the semantic subject of the *wh*-part. Here, we propose that through the *pro* construal, the “split” parts of SQ, between the *wh*-part with a lambda operator and the tag, can be connected in a form of predication, as follows:

- (42) SQ: [_{SAP} [_{CP} OP_{*x*} ...*wh*-phrase(*x*)... (ne)] [_{SA} [_{CP} [_{TP} pro_{*x*} (copula) XP] t_i] ma_i]]
 (predication)

4.3 The copula

To capture the distribution of the copular verb, we propose that the *wh*-part and the tag part are independently derived in Chinese SQ. We will argue that it is the final particle that causes the copula to be optional.

The tag part is argued to be a base-generated simple clause, composed of an empty subject *pro*, an optional copula, a tag, and a final particle, as represented by [*pro* (copula) XP *ma*] or [*pro* (copula) XP or YP *ne*]. Significantly, the copula is optional in front of the tag, no matter what type of the tag it is. This means that it serves only an optional linker between the subject *pro* and the tag, optionally realized at PF.

In addition, we observe that the tag clause requires a final particle to type the entire SQ. This sort of clause-typing is unique to SQ. Here, a question arises: Is there any correlation between the obligatory presence of the final particle *ne/ma* and the optionality of the copula? The answer is positive.

According to Tang's (2015, 2016a, 2016b) silence head analysis on final particles in Chinese, *ma* and *ne* are historically derived from different sources that qualify them as (secondary) predicates under the FP of the silent head F. In light of Ota 1987, Tang (2015, 2016a, 2016b) argues that *ma* historically comes from a verbal negation *wu*, denoting 'not'. Tang believes that the verbal properties of *ma* are inherited from *wu* 'not', serving as a secondary predicate in the second internal conjunct (complement) of the silence head F, as illustrated below.⁷

(43) [[Subject predicate] F [ma]]

As for the particle *ne*, based on Ota 1987, Tang infers that it might be derived from two historic sources. One source might be from *ni*, meaning 'that' in pre-modern Chinese, conveying a demonstrative function; the other source is from *li* 'place', denoting a locative meaning. Tang assumes that *ne* from these two possible sources inherits the anaphoric property, referring to the first conjunct, as in (44). At the same time, as stated by Tang (2016b), distinct from *ma* with verbal properties, *ne* is a nominal, which means that it can function as a nominal predicate in the structure in (44).⁸

(44) [[Subject Predicate] F [ne]]

In light of Tang's (2015, 2016a, 2016b) analysis on final particles, we propose that the prevalent optionality of the copula in front of the tag in SQ is attributed to the predicative

7 The final particle here is not a head, but a complement of the silence head F. This is somewhat different from what we have argued in this work that the final particle is a head on the right of CP. Even so, this analytical difference does not affect the fact that the final particles in question are predicative in nature.

8 A more radical analysis proposed by Tang (2016b, personal communication) is that the first conjunct functions as a subject and the final particle as a predicate in the FP.

nature of the final particle *ma/ne* in Chinese. Due to the (secondary) predicative use of the final particles, the tag XP or [XP or YP] in (45) can stand alone without the aid of the copula, even when the tag is a non-predicative element, such as the DP *mao* ‘cat’ in (40a) and the adverb *xiaoxinyiyi-de* ‘carefully’ in (41b). The predicative nature of the final particle explains why the copula in SQ is always optional.

- (45) a. [[pro (copula) XP] ma]
 b. [[pro (copula) XP or YP] ne]

4.4 SAP, pragmatic roles, and probe-goal relation

So far, we propose that the first conjunct and the second conjunct of SQ are independently derived. In terms of the left-branching structures with C heads on the right, SAP is a structure with its empty head SA on the right in (46). In this structure, the first *wh*-clause CP₁ is the specifier of the head SA, whereas the tag clause CP₂ is the complement of the head SA. The second tag clause is a base-generated clause, composed of an empty subject, an optional copula, a tag, and a final particle. Therefore, no focus movement and deletion is involved. The connection between the *wh*-part and the tag is achieved through the reference of *pro* with the open argument created by the *wh*-phrase in the first conjunct and later through a subject-predicate relation between the *pro* and the rest of the element in the tag clause.

However, SAP is generally motivated as a syntactic projection to host discourse roles such as Speaker and Hearer, but the SAP assumed so far does not host them. We will try to refine our analysis in terms of the pragmatics roles, embraced by Speas and Tenny (2003), Oguro (2017), and Miyagawa (2012).

Speas and Tenny (2003) propose that an SAP selects the CP. The SAP is the place where the assignment of pragmatic roles (Speaker, Hearer, and Utterance content) is related to the configuration in which they appear. Along this line, Oguro (2017) has suggested that interrogative sentences can be classified into three subtypes, according to the positioning of Hearer, which is given in (47).

- (47) a. Plain conjectural questions: Speaker > CP
 b. Polite conjectural questions: Speaker > CP > Hearer
 c. Information-seeking questions: Speaker > Hearer > CP

- (49) $[_{SA^P} [_{SA^P} Speaker[_{SA^P} [_{sa^P} [_{sa^P} Hearer[_{CP1} C_1 (ne)_{[\#Q]/allocative\ probe}] sa] SA]]],$
 $[_{SA^P} [_{SA^P} Speaker[_{SA^P} [_{sa^P} [_{sa^P} Hearer[_{CP2} C_2 ma/ne_{[\#Q]/allocative\ probe}] sa] SA]] SA]]]$

- #### 4.5 Island-insensitivity

Under the *pro* analysis, the tag is predicated of the subject *pro*, and the *pro* has to find an appropriate antecedent in the first conjunct. Building on these facts, I propose that it is the construal of *pro* in the subject position of the tag clause in an SQ that “repairs” or, more specifically, nullifies the violations potentially caused by various islands. Below, I will demonstrate how the *pro* in question nullifies the locality constraints of islands. In (52a), the *pro*, directly referring to the person *x* such that *x* sent the gift within the complex NP, is predicated by the potential answer *Lisi* in a yes-no interrogative. Thus, the interpretation of *pro* transcends the islandhood. Similarly, in (52b), the *pro* refers to the thing *x* such that he buys

9 We are much appreciated for a reviewer's suggestion that Woods (2017) also argues that illocutionary force is separate from clause type. We would adhere to the generalization that clause-typing occurs in C and proposes that the raising of C-to-SA is motivated by the allocative probe/agreement, proposed by Miyagawa (2012). The illocutionary force is projected as an Illocutionary Act Phrase (IAP), similar to the Speech Act Phrase (SAP) proposed by Hill (2007) in the sense of Speas and Tenny 2003. The structure of (ia) can be represented in (ib).

(i) a. Please will you close the door?

b. $[_{IAP} [_{CENTRE\ OF\ EVALUATION} (addressee) [_{IA} [_{IA} (Force-Request) please] [_{CP} [_{C_{[uQ]}} will] [_{TP} you\ close\ the\ door]]]]]]]$
That is, the specifier of IAP, center of evaluation (addressee), resembles the specifier of SaP (Hearer) in the sense of Speas and Tenny 2003 and Oguro 2017. IAP is different from CP, which is in charge of clause typing. We propose that the clause-typing of the second conjunct occurs in $C_{[uQ]}$ which is further raised to the lower sa and SA and even to the higher SA to fulfill the allocative probe-goal relation.

x within the sentential subject island and is predicated of by *shu* ‘book’; in (52c), the *pro* is associated with the person x such that his father met x within the adjunct island and is predicated of by the potential answer *Lisi* without involving any movement.

- (52) a. Zhangsan shou-le [*shei* song de liwu],
 Zhangsan accept-LE who send DE gift
 [pro (shi) Lisi ma]?
 be Lisi Q
 ‘(lit.) Is Lisi the person x such that Zhangsan accepted the gift that x sent?’
- b. Ni renwei [ta mai shenme] bijiao hao,
 you think he buy what more good
 [pro (shi) shu ma]?
 be book Q
 ‘(lit.) Is the book the thing x such that you think that for him to buy x is better?’
- c. Ta [yinwei baba jian-le shei] cai shengqi,
 he because father meet-LE who then angry
 [pro (shi) Lisi ma]?
 be Lisi Q
 ‘(lit.) Is Lisi the person x such that he gets angry because his father met x ?’

The aforementioned discussion explains why SQs are uniformly insensitive to islands.

4.6 Connectivity effects under the *pro* analysis

An important issue we now confront is how the *pro* analysis of SQ proposed here accounts for the connectivity effects if no deletion phenomena occur in the tag clause. The approach I adopt in Section 4.2 is to propose that the *pro* in Chinese SQ is an E-type *pro*, which is interpreted as a disguised definite description, based on Evans’ (1980) donkey pronoun analysis. I will demonstrate that the connectivity effects can be captured under such an analysis.

First, SQ observes Binding Principle A, B, and C. Take Principle A for example. In (53a), the tag *ziji* ‘himself’ is ambiguously referential with the matrix subject *Zhangsan* or the embedded subject *Lisi*. To capture the ambiguity, we suggest that the event *pro* may refer to the embedded event or the matrix event. For the first case, the disguised definite description of the *pro*, being predicated of by the reflexive *ziji* ‘himself’ in the tag clause, is denoted as (53b), in which the embedded subject *Lisi* binds the open variable x in the object position, giving rise to the embedded subject reading. In addition, when the *pro* is anaphoric to the matrix event, the event *pro* is decoded as (53c), in which the ambiguity arises due to the property of the long-distance binding of the reflexive in Chinese (cf. Huang and Liu 2001). This means that the variable x can be bound by the embedded subject *Lisi* or the matrix subject *Zhangsan* and later is predicated of by the reflexive *ziji* ‘himself’ within the tag clause. Thus, the binding occurring

between the antecedent clause and the tag clause can be explicated through predication.

- (53) a. Zhangsan_j renwei Lisi_i zai piping shei,
 Zhangsan think Lisi PROG criticize who
 [pro (shi) ziji_{ij} ma]?
 be himself Q
 ‘Who does Zhangsan_j think that Lisi_i is criticizing, himself_{ij}?’
 b. [The person x_i such that Lisi_i is criticizing x_i] is himself_i?
 c. [The person x_{ij} such that Zhangsan_j thinks that Lisi_i is criticizing x_{ij}] is
 himself_{ij}?

Second, the *pro* analysis can also capture quantifier binding in SQ in terms of predication. In (54a), the pronoun *tade* ‘his’ in the tag is bound by the quantifier subject *meige ren* ‘everyone’ in the *wh*-part. Our analysis predicts that the empty subject refers to a disguised definite description in (54b), in which the open argument x in the object position is bound by the universal quantifier *meige ren* ‘everyone’ in the subject position and connects with the pronoun *tade* ‘his’ in the tag by means of predication.

- (54) a. Meige ren_i dou guanxin shenme,
 every person all care what
 [pro (shi) tade_i quanli ma]?
 be his right Q
 ‘What does everyone_i care about, his_i own right?’
 b. [The thing x_i such that everyone_i cares about x_i] is his_i own right?

Third, regarding the scopal effect, SQ in (55a) may yield two readings. For the first reading, the universal quantifier *meige ren* ‘everyone’ takes scope over the existential quantifier *yi-ben shu* ‘a book’, parallel to the first conjunct. The entire SQ is denoted as ‘whether for each person x there is a (possibly different) book y such that x buy y .’ As to the second specific reading, the SQ can be decoded as ‘whether there is a specific book x such that every person y bought that book x .’ The *pro* analysis can felicitously deal with the ambiguity through the construal of *pro* at LF. As in (55b), the *pro* refers to a disguised definite description, [The thing x_i such that everyone bought x_i], in which the universal quantifier *c*-commands the variable x , which is later predicated of by the tag *a book*, giving rise to the first reading. In addition, the variable x is also realized as a specific argument leading the definite description which contains the universal quantifier in (55b) and links with the tag through predication. In such a way, specific reading is derived.

- (55) a. Meige ren dou mai-le shenme, [pro (shi) *yi-ben shu* ma]?
 every person all buy-LE what be one-CL book Q
 ‘What did everyone buy, a book?’ (every > one; one > every)
 b. [The thing x_i such that everyone bought x_i] is a book_i.

In brief, without resorting to focus movement, the *pro* analysis can satisfactorily capture the connectivity effects with respect to binding, bound pronoun, and even scope in Chinese SQ.

5 Two seeming variants of SQ

Two variants of SQ are investigated to show that the derivation of SQ depends on whether its tag moves and whether a copula exists.

5.1 Variant I: When the tag is not the answer of a *wh*-word

One seeming SQ variant is unique in the fact that its tag is not the correlate of the *wh*-word in the first clause but an element contrastive to its antecedent as in (56).

(56) *Tag not the correlate of the wh-word type:*

- A: Shei zhong shu (ne)? (*Shi) hua ne/*ma?
 who plant tree Q be flower Q
 ‘Who planted trees? And flowers?’
- B: Lisi zhong shu, Zhangsan zhong hua.
 Lisi plant tree Zhangsan plant flower
 ‘Lisi planted trees, and Zhangsan planted flowers.’

As shown in (56A), the tag *hua* ‘flower’ is not a potential answer to the *wh*-phrase *shei* ‘who’; instead, it is contrastive to an element *shu* ‘tree’ in the first clause. That is, the *wh*-question is still open without being answered. In addition, the tag is a constituent question, judged from the obligatory use of the constituent question marker *ne* instead of the yes-no question marker *ma*. In this sense, the entire variant is interpreted as ‘Who planted trees? And (who planted) flowers?’, being composed of two constituent questions, which need to be responded separately as evidenced in (56B), ‘Lisi planted trees, and Zhangsan planted flowers.’ Obviously, *Lisi* and *Zhangsan* are the solicited answers to the *wh*-questions, respectively. This distinction implies that what is missing in the tag may be a part of a full clause parallel with the *wh*-part as in (57).

- (57) Shei zhong shu (ne)? Shei zhong hua ne?
 who plant tree Q who plant flower Q
 ‘Who planted trees? Who planted flowers?’

This assumption can be vindicated for two reasons. First, the additional copula *shi* ‘be’ is prohibited in front of the tag as in (56A). This indicates that the tag of the SQ variant is not a base-generated clause, containing an optional copula in addition to an empty *pro* subject, a tag, and a final particle, akin to the canonical SQs that have been investigated in the literature. Second, we have observed that the SQ variant consists of two constituent questions, needing two separate

answers. With this fact, we can infer that the first particle of the variant, *ne*, is optional, because the *wh*-phrase *shei* ‘who’ is overtly present, whereas the second *ne* is obligatory because the *wh*-phrase in question has been omitted. Thus, the tag question requires the final particle *ne* to remind the hearer that there is an extra *wh*-question closely relating to the first one and that the variant requires two separate answers. In other words, the final particle overriding rule does not occur.

To analyze such a variant, we propose a revised split CP structure for the tag clause based on Tang’s (1989) analysis of Chinese CP (cf. van Craenenbroeck 2004). Tang (1989) argues that CP in Chinese can be split into CP₁ and CP₂, both of which are left-branching projections with the heads, C₁ of CP₁ and C₂ of CP₂, on the right. C₁ is a head for clause-typing (Cheng 1991) and C₂ is a head for housing a contrastive topic in Chinese, a topic-prominent language. In addition, as a *wh*-in-situ language (Huang 1982; Aoun and Li 1993; Tsai 1994, etc.), *wh*-elements in Chinese do not undergo any movement in syntax and are bound by *wh*-operators at the left periphery under the notion of the unselective binding at LF as in (58). In such a tag clause, we propose that the tag *hua* ‘flower’ in (59) undergoes topic movement to SpecTopP before the entire TP containing *wh*-word is elided. The remnants of the ellipsis are a tag and a *wh*-operator. In the meantime, the operator is in a spec-head agreement with the final particle *ne*, typing the second part of the variant as a constituent question.

- (58) [_{CP1} OP_i [_{C1} [_{TopP} Tag [_{Top} [_{TP} ~~wh word~~_{i...}] Top]] C₁]]
- (59) Shei zhong shu (ne)? [_{CP1} OP_i [_{C1} [_{TopP} Hua_j
 who plant tree Q flower
 [_{Top} [_{TP} ~~shei_i zhong t_j~~] Top]] ne]]?
 who plant Q
 ‘Who planted trees? And (who planted) flowers?’

5.2 Variant II: When the tag is not the answer of a yes-no question

The second variant of SQ involves a yes-no question in the first part and a *wh*-question in the second part as in (60A) and (61A). The two questions need to be answered separately, as in (60B) and (61B), indicating that each clause is typed independently. Even so, these two questions are connected by the contrastive use of *ta* ‘him’ in the first clause vs. *wo* ‘me’ in the second clause in (60) and of *ni* ‘you’ vs. *ta* ‘he’ in (61). Crucially, the copula is prohibited, akin to that of the variant I.

- (60) A: *Ni xihuan ta (ma)? (*Shi) wo ne?*
 you like him Q be me Q
 ‘Do you like him? What about me?’
 B: *Shide, wo xihuan ta, bu xihuan ni.*
 yes I like him not like you
 ‘Yes, I like him, but I don’t like you.’

- (61) A: *Ni yao zhe-ben shu (ma)? (*Shi) ta ne?*¹⁰
 you want this-CL book Q be he Q
 ‘Do you want this book? What about him?’
 B: *Shide, wo yao. Ta bu yao.*
 yes I want he not want
 ‘Yes, I do. But he doesn’t.’

To analyze this variant, we propose that the second part has a structure similar to that of the variant I, mainly because the tag is a contrastive topic derived from topic movement and deletion, instead of being a base-generated structure involving the copula *shi* ‘be’. Take (60A) for example. The final particle *ne* is used to type the tag part as a constituent question. The tag *wo* ‘I’, in contrast to *ni* ‘you’ in the first clause, undergoes topic movement to SpecTopP; later, the entire TP in parallel with the counterpart in the first clause is deleted as in (62).

- (62) A: *Ni xihuan ta (ma)?*
 you like him Q
 $[_{CP1} OP_i [_{C'1} [_{TopP} Wo_j [_{Top'} \text{ } [_{TP} \text{ } \overline{t_i} \text{ } \text{ni xihuan } t_j] \text{ Top}]] ne]]?$
 me you like Q
 “Do you like him? What about me?”

To be brief, the two variants of SQ show that different types of fragment in natural speech may display different derivations. The canonical SQ is dominated by SAP-

10 A reviewer wonders why (61A) ends with the final particle *ne* under the condition that it is not an A-not-A question and does not involve any *wh*-expression. We argue that (61A) is not a kind of SQ, because the two questions need to be answered separately as in (61B). The first sentence is a yes-no question, questioning the truth value of the proposition. The second conjunct is a fragment question (FQ), which is a type of constituent question, inquiring whether the target *ta* ‘he’ wants this book or not. Wei (2018) argues that fragment question (FQ) in Mandarin Chinese is derived from topic movement and TP deletion. Structurally, an FQ consists of a topic-like constituent followed by a particle *ne*, which functions as a topic marker and as a constituent question particle simultaneously. The fragment is argued to move to the SpecTopP rather than SpecFocP, because FQ exhibits topic-like properties and respects island effects such as the complex noun phrase and adjunct island. Thus, to analyze this variant, we propose that the target *ta* ‘he’ in the second part is a contrastive topic derived from topic movement and deletion, not a base-generated structure containing the copula *shi* ‘be’. The topic particle *ne* is raised to the higher C on the right to fulfill the function of “typing” an FQ as a constituent question through checking [*uwh*] feature on C with a covert *wh*-operator at SpecCP. The tag *ta* ‘he’, in contrast to *ni* ‘you’ in the first clause, undergoes topic movement to SpecTopP. Later, the entire TP in parallel with the counterpart in the first clause is deleted as in (i).

(i) A: *Ni yao zhe-ben shu (ma)?*
 you want this-CL book Q
 $[_{CP1} OP_i [_{C'1} [_{TopP} Ta_j [_{Top'} \text{ } [_{TP} \text{ } \overline{t_i} \text{ } \text{yao zhe-ben shu } t_j] \text{ Top}]] ne]]?$
 he want this-CL book Q
 ‘Do you want this book? What about him?’

Therefore, we argue that the second part in (61A) is similar to a constituent question involving a *wh*-feature and an overt particle *ne*.

shell structure, being typed as an information/confirmation-seeking question, observing final particle overriding rule. Its tag clause is a base-generated structure containing a *pro*, an optional copula, a tag, and a final particle. By contrast, the two variants in question involve two separate questions, which need answering independently, not observing the final particle overriding rule. For the sake of the prohibition of the copula and the contrastive use of the tag, their tag clauses are derived from an unpronounced structure in parallel with the first clause through topic movement and deletion.

6 Conclusion

This article proposes a *pro* analysis, arguing that the tag part is a base-generated structure, [*pro* (copula) tag *ma/ne*], independent of the *wh*-part in structure. In other words, the tag clause is not derived from a clause parallel with the first conjunct in structure and does not involve any focus movement and deletion. Further, to interpret the fact that the obligatory final particle after the tag dominates the clause-typing of the entire SQ, we suggest that SQ is an SAP-shell structure, headed by a conjunctive-like SA, taking the *wh*-part as its specifier and the tag part as its complement. The entire SQ is typed as an information/confirmation-seeking question. In such a structure, the final particle in the complement clause undergoes clause-typing at C, being raised to the highest SA along with the allocative probe-goal relation/agreement. In the tag clause, the empty subject event *pro* is responsible for connecting the *wh*-part through referring to a disguised definite description of an event, which contains an open argument (variable) created by a *wh*-phrase. That explains why the *pro* is ubiquitously co-referential with various types of antecedent, either canonical or peripheral arguments, and its corresponding tag. Through the *pro* construal and the follow-up predication activated by (copula) tag predicate, the interpretation of SQ is achieved.

The advantages of the *pro* analysis are miscellaneous. The island-insensitivity of SQ in Chinese, different from island-sensitivity in English and Spanish, can be approached by the construal of *pro*. The empty subject can directly refer to an open argument of the previous event confined within an island. That is, the islands are nullified through the *pro* reference. What is more, connectivity effects with respect to binding, bound pronoun and scope are identified through interpreting the interaction between the definite description of a *pro* as a subject and its corresponding tag as a predicate in the logical form.

Finally, the investigation of the two variants of SQ sheds light on the analytical implication of the fragmentary structures in the language. These two variants display characteristics drastically different from those of canonical SQs, leading to a conclusion that the derivation of a fragment depends on whether the fragment moves or not and whether a copula exists.

Acknowledgments

Earlier versions of this article were presented at TEAL-11, on June 3–4, 2017 at Academia Sinica, Taiwan and at NACCL-30, March 9–11, 2018, at the Ohio State University, U.S.A. I am grateful to the audiences for their comments and questions. I would like to express my gratitude to the two anonymous reviewers for their constructive comments, which have improved this article in a more comprehensive way. Thanks are also due to C.-T. James Huang, Chinfa Lien, Yen-Hui Audrey Li, Jo-Wang Lin, Chen-Sheng Luther Liu, T.-H. Jonah Lin, Sze-Wing Tang, Shu-ing Shyu, and Wei-Tien Dylan Tsai for their discussions. Research for this article was supported by grants from the “Ministry of Science and Technology” in Taiwan (MOST 105-2410-H-017-029, 107-2410-H-017-011). I am responsible for all errors that remain.

References

- Abels, Klaus. 2011. Don't repair that island! It ain't broke. Manuscript, University College London.
- Aoun, Joseph & Y.-H. Audrey Li. 1993. Wh-elements in situ: Syntax or LF? *Linguistic Inquiry* 24(2). 199–238.
- Arregi, Karlos. 2007. Syntax and semantics of split questions. In José Camacho, Nydia Flores-Ferran, Liliana Sanchez, Viviane Deprez & María José Cabrera (eds.), *Romance linguistics 2006: Selected papers from the 36th Linguistic Symposium on Romance Languages (LSRL)*, 15–28. Philadelphia: John Benjamins.
- Arregi, Karlos. 2010. Ellipsis in split questions. *Natural Language and Linguistic Theories* 28(3). 539–592.
- Baker, Mark. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Barros, Matthew, Patrick Elliott & Gary Thoms. 2014. There is no island repair. Manuscript, Rutgers University, University College London and University of Edinburgh.
- Bauerle, Rainer. 1979. Questions and answers. In Rainer Bauerle, Urs Egli & Arnim von Stechow (eds.), *Semantics from different points of view*, 61–74. Berlin: Springer-Verlag.
- Camacho, Jose. 2002. Wh-doubling: Implications for the syntax of Wh-movement. *Linguistic Inquiry* 33. 157–164.
- Cheng, Lisa L.-S. 1991. *On the typology of wh-questions*. Cambridge, MA: Massachusetts Institute of Technology Dissertation.
- Cheung, Chi-Hang, Candice. 2014. Wh-fronting and the left periphery in Mandarin. *Journal of East Asian Linguistics* 23. 393–431.
- Craenenbroeck, Jeroen van. 2004. *Ellipsis in Dutch dialects* (LOT Dissertation Series 96). Utrecht: LOT.
- É. Kiss, Katalin. 1998. Identificational focus versus information focus. *Language* 74. 245–273.

- Evans, Gareth. 1980. Pronouns. *Linguistic Inquiry* 11. 337–362.
- Hankamer, Jorge & Ivan Sag. 1976. Deep and surface anaphora. *Linguistic Inquiry* 7. 391–428.
- Hill, Virginia. 2007. Vocatives and the pragmatics-syntax interface. *Lingua* 117. 2077–2105.
- Huang, C.-T. James. 1982. Logical relations in Chinese and the theory of grammar. Cambridge, MA: Massachusetts Institute of Technology Dissertation.
- Huang, C.-T. James. 1988. Shuo ‘*shi*’ he ‘*you*’ [On ‘be’ and ‘have’ in Chinese]. The *Bulletin of the Institute of History and Philology, Academia Sinica* 59(1). 43–64.
- Huang, C.-T. James & Chen-Sheng Luther Liu. 2001. Logophoricity, attitudes and *ziji* at the interface. In Peter Cole, Gabriella Hermon & C.-T. James Huang (eds.), *Long distance reflexives* (Syntax and Semantics 33), 141–195. New York: Academic Press.
- Kayne, Richard. 2015. The silence of heads. Manuscript, New York University.
- Li, Yen-Hui Audrey. 2017. Chinese Ba. In Martin Everaert & Henk van Riemsdijk (eds.), *The Wiley Blackwell companion to syntax*, 2nd edn, 1–72. Malden, MA: Wiley-Blackwell.
- Lobeck, Ann. 1995. *Ellipsis: Functional heads, licensing, and identification*. Oxford: Oxford University Press.
- Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and identity in ellipsis*. Oxford: Oxford University Press.
- Merchant, Jason. 2004. Fragments and ellipsis. *Linguistics and Philosophy* 27. 661–738.
- Miyagawa, Shigeru. 2012. Agreements that occur mainly in the main clause. In Lobke Aelbrecht, Liliane Haegeman & Rachel Nye (eds.), *Main clause phenomena: New horizons*, 79–112. Amsterdam: John Benjamins.
- Morgan, Jerry. 1973. Sentence fragments and the notion “sentence”. In Braj B. Kachru, Robert B. Lees, Yakov Malkiel, Angelina Pietrangeli & Sol Saporta (eds.), *Issues in linguistics*, 719–751. Urbana, IL: University of Illinois Press.
- Oguro, Takeshi. 2017. Speech act phrase, conjectural questions, and hearer. *U. Penn Working Papers in Linguistics* 23(1). 190–199.
- Ota, Tatsuo. 1987. *A historical grammar of modern Chinese*. Beijing: Peking University Press.
- Rizzi, Luigi. 1986. Null objects in Italian and the theory of pro. *Linguistic Inquiry* 17. 501–557.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar*, 281–337. Dordrecht: Kluwer Academic Publishers.
- Ross, John Robert. 1969. Guess who? In Robert Binnick, Alice Davison, Georgia Green & Jerry Morgan (eds.), *Proceedings of the Fifth Regional Meeting of the Chicago Linguistic Society*, 252–286. Chicago: University of Chicago Press.
- Schwarzschild, Roger. 1999. GIVENness, AvoidF, and other constraints on the placement of accent. *Natural Language Semantics* 7. 141–77.

- Speas, Peggy & Carole Tenny. 2003. Configurational properties of point of view roles. In Anna Maria Di Sciullo (ed.), *Asymmetry in grammar*. Vol. 1, *Syntax and semantics*, 315–344. Amsterdam: John Benjamins.
- Tang, Sze-Wing. 2010. *Formal Chinese syntax*. Shanghai: Shanghai Educational Publishing House.
- Tang, Sze-Wing. 2015. A generalized syntactic schema for utterance particles in Chinese. *Lingua Sinica* 1. 1–24.
- Tang, Sze-Wing. 2016a. Sentence-final particles as conjuncts under the cartographic approach. *Bulletin of Linguistic Studies* 16. 1–10.
- Tang, Sze-Wing. 2016b. Predicative function of utterance particles in Chinese. In Pang-hsin Ting, Samuel Hung-nin Cheung, Sze-Wing Tang & Andy Chin (eds.), *New horizons in the study of Chinese: Dialectology, grammar, and philology — Studies in honor of Professor Anne Yue*, 15–24. Hong Kong: T.T. Ng Chinese Language Research Centre, Institute of Chinese Studies, The Chinese University of Hong Kong.
- Tang, Ting-Chi. 1989. *Studies on Chinese morphology and syntax: 2*. Taipei: Student Book Co., Ltd.
- Tsai, Wei-Tien Dylan. 1994. *On economizing the theory of A'-Dependencies*. Cambridge, MA: Massachusetts Institute of Technology dissertation.
- Wei, Ting-Chi. 2016. Fragment answers in Mandarin Chinese. *International Journal of Chinese Linguistics* 3(1). 100–131.
- Wei, Ting-Chi. 2018. Fragment questions in Mandarin Chinese: Topic movement and pied-piping. *Language and Linguistics* 9(3). 266–305.
- Williams, Edwin S. 1980. Predication. *Linguistic Inquiry* 11. 203–238.
- Woods, Rebecca. 2017. Towards a model of the syntax-discourse interface: A syntactic analysis of *please*. Manuscript, University of Huddersfield.

Ting-Chi Wei

Mailing address: Graduate Institute of Taiwan History, Culture and Languages, National Kaohsiung Normal University, No. 116, Ho-Ping first Road, Kaohsiung 80201, Taiwan

Email: tingchiwei@ncku.edu.tw

Received: February 28, 2019

Accepted: March 27, 2020

漢語分裂問句

魏廷冀

國立高雄師範大學

提要

本文主張漢語分裂問句是一種由兩種問句所組成的單一問句，第一句為疑問詞問句，第二句為是非問句或選擇問句所形成的附加成分問句（tag）；此雙句在語用上可理解為一種尋求資訊或認可之問句；結構上利用言語行為詞組殼（SAP-shell）來表示；我們採用 *pro* 分析來連貫此雙句，而非透過焦點移位及刪除分析（Arregi 2010）或空中心語分析（Kayne 2015; Tang 2015）；其關鍵差異在於第二句附加成分問句之結構是一種由基底衍生的簡單句 [*pro*（是）附加語 嗎 / 呢]，而非與第一句相對等之平行結構；此一主張可以解釋：漢語分裂問句中，語尾助詞之分布及其句式設定、“是”的選擇性出現、多類型之附加成分、連結效應以及無孤島限制等現象。此外透過兩種變體結構之檢視，我們提出區辨各類分裂問句的衍生，必須考慮其附加成分是否涉及移位以及連繫詞出現與否。

關鍵詞

刪除，移位，言語行為詞組，孤島效應，連結效應