

Derivation of the Apparent Narrow Scope of Sentence-Final Particles in Chinese: A Reply to Erlewine (2017)

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Abstract

Erlewine (2017) suggests that certain sentence-final particles (SFPs) in Mandarin Chinese such as “sentential *le*” and *eryi* are located lower than the C-domain, using a number of arguments relating to the scopal interaction of these SFPs, subjects, and other verb phrase (vP) level elements. The present paper proposes an alternative view of the phenomena considered by Erlewine (2017) and maintains the claim that sentential *le* and *eryi* are C-domain elements. First, I argue that *shi* ‘be’, in the negative form – *bu shi* ‘not be’ – should be analyzed as an independent verb, which takes a clausal complement headed by *le* or *eryi*. The apparent narrow scope of *le* and *eryi* is due to the biclausal analysis of the entire sentence. Second, the sentence-initial determiner phrase (DP) cannot be analyzed as the real subject of the verb *shi* ‘be’ but must be analyzed as the matrix topic of the entire sentence and, therefore, is higher than the complementizer phrase (CP) headed by *le* or *eryi*. This explains why sometimes *le* or *eryi* does not have scope over the subject. Third, the *wh*-subject cannot get an indefinite reading in a sentence with a final particle *le* because the \exists -closure triggered by *le* applies at the I'-level by excluding the subject systematically (Huang 1982). The \exists -quantifier, which is introduced in a position lower than the surface subject position, cannot bind the *wh*-subject as a variable. The position where \exists is generated remains independent of whether the \exists -closure is triggered by low particles, such as *le*, or by high particles, such as the *yes–no* question particle *ma*. Therefore, the low peripheral particles *le* and *eryi* are still within the CP domain and thus higher than vP.

Keywords

sentence-final particle, left periphery, cartography, scope, Mandarin Chinese

1. Peripheral functional projections in Chinese

Following Lee (1986), Paul (2014, 2015) argues that sentence-final particles (SFPs) are complementizers that occupy the head position in different complementizer phrases (CPs) and that they can only be present in root contexts. Based on the split-CP hypotheses (cf. Rizzi 1997, 2004; Cinque 1999; Cinque and Rizzi 2008, and so on), she argues for a three-layered peripheral domain consisting of different functional projections to host these particles in Mandarin Chinese.

- (1) Paul's (2014, 2015) hierarchy
(TP) < low C < medium C (force) < high C (attitude)

The low C hosts tense-related particles, the medium C hosts force-related particles, and the high C hosts the speaker's attitude-related particles. These three roughly divided domains have also been argued for in Pan and Paul (2016), and, in Paul and Pan (2017). Pan (2015) proposes a more detailed hierarchy, as shown in (2). The low C in the system of Paul (2015) is further divided into a projection related to the sentential aspect S.AspP and a projection hosting the exclusive focus particles, such as *eryi* 'only' in the sense of Erlewine (2011).

- (2) (TP) < **S.AspP** (sentential aspect particles) < **OnlyP** (exclusive focus particles) < **iForceP** (illocutionary force) < **SQP** (special questions) < **AttP1** < **AttP2** (discourse particles related to the speaker's attitude)

Here are two examples from Pan (2015, 2019), which show the co-occurrence of different peripheral functional projections in Mandarin Chinese.

- (3) a. TP < S.AspP-*le* < OnlyP-*eryi* < iForceP-*ma*

$$[_{iForceP} [_{OnlyP} [_{S.AspP} [_{TP} \text{Ta} \quad \text{zhibuguo} \quad \text{bu} \quad \text{he} \quad \text{yingshi}$$

$$\text{she} \quad \text{no.more.than} \quad \text{Neg} \quad \text{drink} \quad \text{English.style}$$

$$\text{hongcha}] [_{S.Asp^\circ} \textit{le}]] [_{Only^\circ} \textit{eryi}]] [_{iForce^\circ} \textit{ma}]]]?$$

$$\text{black.tea} \quad \text{LE} \quad \text{ERYI} \quad \text{Q}_{yes-no}$$
 (Lit.) 'Is it just the case that she no longer drinks English black tea?'
 = 'Does she only no longer drink English black tea?'
 b. TP < S.AspP-*le* < OnlyP-*eryi* < NegQP-*shenme* 'what' < AttP-*a*

$$[_{AttP} [_{NegQP} \textit{Shenme} [_{OnlyP} [_{S.AspP} [_{TP} \text{ta} \quad \text{zuowan} \quad \text{zhi} \quad \text{qu} \quad \text{he} \quad \text{jiu}$$

$$\text{what} \quad \text{he last.night} \quad \text{just go} \quad \text{drink} \quad \text{alcohol}$$

$$[_{S.Asp^\circ} \textit{le}]] [_{Only^\circ} \textit{eryi}]] [_{Att^\circ} \textit{a}]]]$$

$$\text{LE} \quad \text{ERYI} \quad \text{A}$$
 'Oh, it is not true that he only went to drink alcohol last night! (He went to dance too!)

The hierarchical order of these projections is subject to a principle functioning at the syntax-discourse level, which is called "The Subjectivity Scale Constraint" (cf. Pan, 2019):

(4) Subjectivity Scale Constraint

The higher a functional projection is located, the more direct the way in which such a projection is linked to the speaker’s opinion becomes, the more subjective the interpretation of such a projection is, and the more difficult it is for such a projection to be embedded.

Table 1 gives an overview of the periphery in Mandarin discussed by Pan (2019).

Table 1 Peripheral functional projections in chinese proposed in Pan (2015, 2019)

Projections		Particles/ operators	Discourse function	Embedded?
S.AspP (sentential aspect)		來著 ¹ <i>laizhe1</i>	Recent past	Yes
		了 <i>le</i>	State changing	Yes
		呢 ¹ <i>ne1</i>	Progressive aspect	Yes
OnlyP		而已 <i>eryi</i>	Sentential exclusive focus	Yes
iForceP (illocutionary force)		嗎 <i>ma</i>	Standard <i>yes–no</i> question	No
		吧 ¹ <i>ba1</i>	Weak imperative	No
		吧 ² <i>ba2</i>	Confirmation <i>yes–no</i> question	No
		Op- <i>wh</i> (null)	<i>Wh</i> -question operator	No
SQP (special questions)	RheQP	Negative operator: ¬	Rhetorical question	No
	NegQP	什麼 <i>shenme</i> / 哪裡 <i>nali</i> + ¬	Negative <i>wh</i> -question	No
AttitudeP (speaker’s attitude)	Low layer	呢 ² <i>ne2</i>	Speaker’s attitude, subjective opinion, etc.	No
	High layer	啊 <i>a</i> , 哎 <i>ei</i> , 喂 <i>bei</i> , 啦 <i>la</i> , 嘞 <i>lei</i> , 呐 <i>na</i> , 呀 <i>ya</i> , 嘛 <i>ma</i> , 來著 ² <i>laizhe2</i> , 吧 ³ <i>ba3</i> , etc.		

Erlewine (2017) shows that low particles (i.e., the sentential aspect particles, such as *le* and the exclusive focus particle *eryi* ‘only’) sometimes do not have scope over the subject in a given sentence. It seems that these particles are still inside the tense phrase (TP).

In this paper, I argue that SFPs can uniformly take a TP as complement and that they are indeed in the domain of the CP. Crucially, I show that the apparent low scope of these SFPs results from different derivations. I also give an alternative analysis of the data that constitute the main arguments of Erlewine’s proposal.

2. Argument based on negation

In this section, I discuss the first argument of Erlewine (2017) in favor of the low scope of SFPs based on the two forms of negation, and I offer my own analysis. The analysis presented in this section has been extensively discussed in Pan (2019: Ch. 2), and I reproduce only the crucial reasoning here.

2.1 Two types of negative forms

The first argument is based on the so-called two forms of negation in Chinese: *bu* ‘not’ and *bushi* ‘not-be’. Erlewine’s (2017) crucial examples are based on examples provided by Soh and Gao (2006), as shown in (5–6).

- (5) SFP *le* and *eryi* take scope above *bu* ‘not’
- a. *bu* ‘not’...*le*
- | | | | | |
|----|-----|-------|------|-----|
| Wo | bu | xiang | jia | le. |
| I | Neg | miss | home | LE |
- Asserts: ‘I do not miss home now.’
 Presupposes: ‘I did miss home before.’
 Scope: *le* > Neg; *Neg > *le*
- b. *bu* ‘not’...*eryi* ‘only’
- | | | | | |
|----|-----|-------|--------------------|-------|
| Wo | bu | he | [cha] _F | eryi. |
| I | Neg | drink | tea | ERYI |
- (i) *eryi* ‘only’ > *bu* ‘not’
 ‘I only don’t drink [tea]_F.’
 → I drink everything else.
- (ii) **bu* ‘not’ > *eryi* ‘only’
 *‘I don’t only drink [tea]_F.’
 → I also drink other things.
- (6) SFP *le* and *eryi* take scope below *bushi* ‘not be’
- a. *bushi*...*le*
- | | | | | |
|----|-------|-------|------|-----|
| Wo | bushi | xiang | jia | le. |
| I | Neg | miss | home | LE |
- Asserts: ‘I do not miss home now.’
 Presupposes: ‘I did not miss home before.’
 Scope: **le* > *bushi* ‘not’; *bushi* ‘not’ > *le*
- b. *bushi* ‘not-be’...*eryi* ‘only’
- | | | | | |
|----|-------|-------|--------------------|-------|
| Wo | bushi | he | [cha] _F | eryi. |
| I | Neg | drink | tea | ERYI |
- (i) **eryi* ‘only’ > *bushi* ‘not’
 *‘I only don’t drink [tea]_F.’
 → I drink everything else.
- (ii) *bushi* ‘not’ > *eryi* ‘only’
 ‘I don’t only drink [tea]_F.’
 → I also drink other things.

From the scope interaction tests in (5–6), Erlewine shows that the SFPs *le* and *eryi* can have scope over *bu* ‘not’ (cf. (5)) but they cannot have scope over *bushi* ‘not-be’ (cf. (6)). The resulting scope hierarchy is as follows: *bushi* > *le/eryi* > *bu*, in that particles *le* and *eryi* are located exactly between the two negative forms. This leads to the conclusion that both particles are still located inside the TP.

2.2 The verbal status of *shi* ‘be’

This section presents an alternative account of this contrast based on the assumption that the negative form *bushi* ‘not be’ can be decomposed into [*bu* ‘not’ + *shi* ‘be’]. In Chinese, both *bu* ‘not’ and *shi* ‘be’ can be used independently since they are not bound morphemes. Under this view, *shi* ‘be’ is treated as a true verb. Also note that the verbal status of *shi* ‘be’ in different structures has been extensively discussed by Paul (2015) and Pan (2017). I reproduce some crucial arguments in support of this assumption from these works.

First, probability adverbs such as *keneng* ‘possibly’ (cf. 7a) and *yiding* ‘certainly’ (cf. 7b) can be inserted between *bu* ‘not’ and the verb *shi* ‘be’.

- (7) a. *bu* ‘not’ > *keneng* ‘possibly’ > *shi* ‘be’ > [_{CP} *le* > TP2]

[_{TopP} Zhangsan]_j [_{TP1} **bu** tai keneng **shi**
Zhangsan Neg too possibly be
[_{S.AspP=CP} [_{TP2} *pro*_j shengbing] le]]].
be.sick LE

‘As for Zhangsan, it is not quite possible that he becomes sick.’

- b. *bu* ‘not’ > *yiding* ‘certainly’ > *shi* ‘be’ > [_{CP} *le* > TP2]

[_{TopP} Zhangsan]_j [_{TP1} **bu** yiding **shi**
Zhangsan Neg certainly be
[_{S.AspP=CP} [_{TP2} *pro*_j shengbing] le]]].
be.sick LE

‘As for Zhangsan, it is not necessarily the case that he becomes sick.
(It could be the case that he is only a bit tired.)’

Importantly, the sentence-initial *Zhangsan* is analyzed as the matrix topic of the entire sentence. The verb *shi* ‘be’ is analyzed as the matrix verb of TP1; therefore, *shi* ‘be’ in this case is a true verb preceded by both the negative adverb *bu* ‘not’ and probability adverbs such as *keneng* ‘possibly’ and *yiding* ‘certainly’. The verb *shi* ‘be’ takes a subordinate clause CP (i.e., the S.AspP headed by the sentence-final *le*) as its complement. The null subject *pro* inside TP2 is controlled by the matrix topic *Zhangsan*, either through the “Generalized Control Rule” (cf. Huang 1989) or through “Prominence Control” (cf. Pan 1998).

The topicalization analysis is also supported by the fact that topics in these two sentences can also be reconstructed in the original subject position inside TP2, which is occupied by *pro*, as shown in (8):

- (8) a. The original sentence from which (7a) is derived
 [TP₁ **Bu** tai keneng **shi** [_{S,AspP=CP} [TP₂ Zhangsan shengbing] le]].
 Neg too possibly be Zhangsan be.sick LE
 ‘It is not quite possible that Zhangsan becomes sick. (It could also be possible that the air is terribly polluted here.)’¹
- b. The original sentence from which (7b) is derived
 [TP₁ **Bu** yiding **shi** [_{S,AspP=CP} [TP₂ Zhangsan shengbing] le]].
 Neg certainly be Zhangsan be.sick LE
 ‘It is not necessarily the case that Zhangsan becomes sick. (It could be possible that the air is terribly polluted here.)’

The same analysis applies to *eryi* ‘only’. In (9a), the sentence-initial *ta* ‘he’ is analyzed as the matrix topic of the entire sentence. The *OnlyP* headed by *eryi* serves as the subordinate clause of the matrix verb *shi* ‘be’. The matrix topic *ta* ‘he’ can be further reconstructed in the position occupied by *pro* inside the *OnlyP*, as shown in (9b).

- (9) a. *bu* ‘not’ > *jiande* ‘necessarily’ > *shi* ‘be’ > [_{CP} *eryi* ‘only’ > TP₂]
 [_{TopP} Ta_j [_{TP1} **bu** jiande **shi**
 he Neg necessarily be
 [_{OnlyP=CP} [_{TP2} *pro*_j zhi he cha] *eryi*]]].
 only drink tea ERYI
 ‘As for him, it is not necessarily the case that he only drinks tea.’²
- b. The original sentence from which (9a) is derived
 [TP₁ **Bu** jiande **shi** [_{OnlyP=CP} [TP₂ ta zhi he cha] *eryi*]];
 Neg necessarily be he only drink tea ERYI
 ([TP₃ ye keneng **shi** [_{CP} [TP₄ jintian de kafei bu tai hao]]]).
 also necessarily be today DE coffee Neg too good
 ‘It is not necessarily the case that he only drinks tea; (it could also be possible that today’s coffee is not good.)’

Furthermore, the sentence initial topic can also be a hanging topic. In (10), the topic *zhe-ge shijie* ‘this world’ is not associated with any gap or *pro* inside the CP which is the complement clause of the matrix verb *shi* ‘be’.

- (10) [_{TopP} Zhe-ge shijie ne, [_{TP1} **bu** jiande **shi**
 this-Cl world NE Neg necessarily be
 [_{CP} [TP₂ nuli jiu yiding you huibao]]].
 hard.work then certainly have return
 ‘As for this world, it is not necessarily the case that hard work always pays off.’

1 Another reading with only the subject *Zhangsan* being focalized is also available.

2 In this example, *jiande* ‘necessarily’ is treated as a negative polarity item; it is also possible to treat *bujiande* ‘not necessarily’ as a single item.

Note that the sentence containing an apparent subject of *shi* ‘be’, which is analyzed as a left-dislocated topic in the present paper, does not resist the presence of other types of topics. For instance,

(11) a. Aboutness topic > Left-dislocated topic

[_{TopP1} Shuiguo ya, [_{TopP2} ta_j [_{TP1} bu jiande shi
fruit YA he Neg necessarily be
[_{CP} [_{TP2} pro_j xihuan pingguo]]]]].
like apple

‘As for fruits, as for him, he does not necessarily like apples.’

b. Left-dislocated topic > Aboutness topic

[_{TopP1} Ta_j ya, [_{TopP2} shuiguo ne [_{TP1} bu jiande shi
he YA fruit NE Neg necessarily be
[_{CP} [_{TP2} pro_j xihuan pingguo]]]]].
like apple

‘As for him, as for fruits, he does not necessarily like apples.’

In (11), *shuiguo* ‘fruits’ is interpreted as an Aboutness topic and *ta* ‘he’ is analyzed as a left-dislocated topic. The order between them is relatively free.

Third, modal auxiliary verbs, such as *hui* ‘will’ and *yinggai* ‘should’ can also be inserted between *bu* ‘not’ and *shi* ‘be’, as demonstrated in (12):

(12) *bu* ‘not’ > *hui* ‘will’ > *shi* ‘be’ > [_{CP} *le/eryi* > TP2]

a. [_{TopP} Ta_j [_{TP1} **bu** hui **shi** [_{S.AspP=CP} [_{TP2} pro_j xiang jia] le]]].
he Neg will be miss home LE

‘As for him, it cannot be the case that he feels homesick.’

b. [_{TopP} Ta_j [_{TP1} **bu** hui **shi**
she Neg will be
[_{OnlyP=CP} [_{TP2} pro_j zhi shuo yingwen] eryi]]].
only speak English ERYI

‘As for her, it cannot be the case that she only speaks English.’

(13) *bu* ‘not’ > *yinggai* ‘should’ > *shi* ‘be’ > [_{CP} *le/eryi* > TP2]

a. [_{TopP} Ta_j [_{TP1} **bu** yinggai **shi**
he Neg should be
[_{S.AspP=CP} [_{TP2} pro_j chu guo] le]]].
go.out country LE

‘As for him, it should not be the case that he went abroad.’

b. [_{TopP} Ta_j [_{TP1} **bu** yinggai **shi**
he Neg should be
[_{OnlyP=CP} [_{TP2} pro_j zhi shuo yingwen] eryi]]].
only speak English ERYI

‘As for him, it should not be the case that he only speaks English.’

Sometimes the topics in both sentences can be reconstructed in the subject position in TP2, as shown in (14):

- (14) The original sentence from which (12a) is derived
 $[_{TP1}$ Bu hui shi $[_{S,AspP=CP}$ $[_{TP2}$ ta xiang jia] le]].
 Neg will be he miss home LE
 ‘It cannot be the case that he feels homesick. (It could be the case that he is only a bit tired.)’

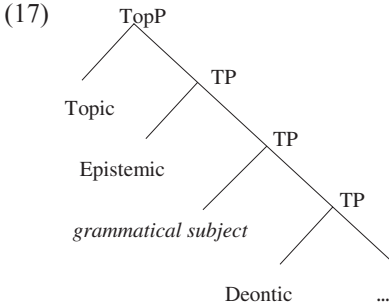
In (13), the auxiliary *yinggai* ‘should’ takes its epistemic reading. The epistemic modal is always located in a relatively higher position and can take a clausal complement. For instance,

- (15) a. $[_{TP1}$ Yinggai $[_{S,AspP=CP}$ $[_{TP2}$ zhe zhou bu hui
 should this week Neg will
 zai xia xue] le]].
 again fall snow LE
 ‘It should be the case that it stops snowing this week.’
 b. $[_{TP1}$ Yinggai $[_{S,AspP=CP}$ $[_{TP2}$ ta bu zhi hui shuo
 should he Neg only can speak
 yingwen] eryi]].
 English ERYI
 ‘It should be the case that he not only speaks English.’
 c. Topic version of (15b)
 $[_{TopP}$ Ta_j $[_{TP1}$ yinggai $[_{S,AspP=CP}$ $[_{TP2}$ *pro*_j bu zhi hui
 he should Neg only can
 shuo yingwen] eryi]].
 speak English ERYI
 ‘As for him, it should be the case that he not only speaks English.’

In both sentences, *yinggai* ‘should’ has an epistemic meaning. Syntactically, it takes an S.AspP or an *OnlyP* as its complement. The wide scope of *yinggai* ‘should’ in both cases can be paraphrased as ‘it should be the case...’ Let us examine closely (15b). The subject *ta* ‘he’ inside TP2 can be topicalized in the sentence initial position and can only be interpreted as a topic, as shown in (15c). Importantly, in (15c), *ta* ‘he’ cannot be interpreted as the grammatical subject of *yinggai* ‘should’ under its epistemic reading. This is because only the deontic reading of *yinggai* ‘should’ can take a grammatical subject, such as in (16a). (16b) shows that the deontic reading of *yinggai* ‘should’ cannot take a clausal complement.

- (16) a. Wo yinggai zai zhe-yi zhan xia che.
 I should at this-one stop get.off bus
 ‘I should get off the bus at this stop.’
 b. *Yinggai wo zai zhe-yi zhan xia che.
 should I at this-one stop get.off bus
 (‘I should get off the bus at this stop.’)

The observed hierarchy is the following: Topic > epistemic *yinggai* ‘should’ > grammatical subject > deontic *yinggai* ‘should’.



Note that this analysis also applies to sentential adverbs such as *kending* ‘certainly’ and *keneng* ‘possibly’. They can be higher than the surface subject; in this case, they are analyzed as adjuncts of the entire TP.

- (18) [_{TP} Kending [_{TP} Zhangsan mei shuo-guo zhe-yang de hua]].
 certainly Zhangsan Neg speak-Exp this-kind DE words
 ‘Certainly, Zhangsan never said such a thing.’
 = ‘It is certain that Zhangsan never said such a thing.’

Probability adverbs, such as *keneng* ‘possibly’ and *kending* ‘certainly’, can also precede *bu* ‘not’ and modify the verb *shi* ‘be’. Still, the subject at the surface is analyzed as a matrix topic.

- (19) a. *kending* ‘certainly’ > *bu* ‘not’ > *shi* ‘be’ > [_{CP} *le* > TP2]
 [_{TopP} Zhangsan_j [_{TP1} kending bu shi
 Zhangsan certainly Neg be
 [_{S.AspP=CP} [_{TP2} *pro*_j shi zong] *le*]]].
 lost trace LE
 ‘As for Zhangsan, it is certainly not the case that he disappeared.’
 b. *keneng* ‘possibly’ > *bu* ‘not’ > *shi* ‘be’ > [_{CP} *eryi* ‘only’ > TP2]
 [_{TopP} Xiaohong_j [_{TP1} keneng bu shi
 Xiaohong possibly Neg be
 [_{OnlyP=CP} [_{TP2} *pro*_j zhi shuo yingyu] *eryi*]]].
 only speak English ERYI
 ‘As for Xiaohong, it is possibly not the case that she only speaks English.’

Importantly, the verbal use of *shi* ‘be’ should be distinguished from the emphatic use of *shi* ‘be’. Sometimes, when a verb is preceded by *shi* ‘be’, the verb is focalized and *shi* ‘be’ in this case functions as the emphatic *do* in English. In the emphatic use, *shi* ‘be’ is often stressed.

- (20) Wo SHI xiwang mingnian qu yi-ci Beijing.
 I be hope next.year go one-time Beijing.
 ‘I do hope that I can visit Beijing next year.’

If the main verb is preceded by adverbs, *shi* ‘be’ must precede these adverbs. Still, it is *shi* ‘be’ that is stressed.

- (21) Wo SHI hen bu xihuan chi nailao.
 I be very not like eat cheese
 ‘I indeed do not like cheese.’

Conversely, when *shi* ‘be’ functions as a matrix verb which takes a clausal complement, *shi* ‘be’ is generally not stressed. For instance, in (22), *shi* ‘be’ cannot be stressed.

- (22) [_{TopP} Zhangsan_j [_{TP1} kending bu keneng shi
 Zhangsan certainly not possibly be
 [_{CP} [_{TP2} *pro*_j kan-chuan-le nide baxi]]]].
 see-through-Perf your trick
 ‘As for Zhangsan, it is certainly not possible that he saw through your little trick.’

2.3 My account

I showed in the previous section that the negative element *bu-shi* can be decomposed as a negation *bu* ‘not’ and the verb *shi* ‘be’. *Shi* ‘be’ is a matrix verb and takes a clausal complement. In this section, I show how this analysis can account for the initial contrast that Erlewine (2017) observes between the two negative forms: *bu* ‘not’ and *bu shi* ‘not be’. Importantly, *bu* ‘not’ and *bu shi* ‘not be’ do not have the same interpretation; namely, *bu shi* is interpreted as “*it is not the case that ...*”. For instance,

- (23) a. TopP > Neg > *shi* ‘be’ > [_{CP} *le* > TP2]
 [_{TopP} Zhangsan_j [_{TP1} bu shi [_{S.AspP=CP} [_{TP2} *pro*_j sheng bing] le]]].
 Zhangsan Neg be rise sickness LE
 ‘As for Zhangsan, it is not the case that he is sick.’
 b. The original sentence from which (23a) is derived
 [_{TP1} Bu shi [_{S.AspP=CP} [_{TP2} Zhangsan sheng bing] le]]].
 Neg be Zhangsan rise sickness LE
 ‘It is not the case that Zhangsan is sick.’

In (23a), the verb *shi* ‘be’ is the essential verbal element in TP1 and it takes a CP clause as its complement. In this particular case, the CP in question is the S.AspP headed by the sentence-final *le*. *Zhangsan* is located in the matrix topic position and it is associated with the null subject *pro* inside TP2. The sentence-final *le* can only be parsed with the embedded predicate *sheng bing* ‘be sick’ but not with the matrix verb *shi* ‘be’. Therefore, the change-of-state interpretation is directly realized on *sheng bing* but not on *shi*. As a result, (23a) cannot be interpreted as “*it is no longer the case that Zhangsan is sick.*” That is why the sentence-final *le* seems to have a narrow scope lower than both the negative form *bu shi* ‘not be’ and the subject *Zhangsan*. In fact, *le* always takes a wide

scope over a TP. Under the analysis that *shi* ‘be’ takes the clause headed by *le* as its complement, (23a) has a bi-clausal structure rather than a mono-clausal structure. As a result, it is not the case that *shi* ‘be’ is higher than *le* inside the same clause.

The sentence in (24) shows that the matrix verbal *shi* ‘be’ necessarily takes a wide scope over the entire complement clause.³

- (24) [_{TP1} Bu shi [_{S.AspP1=CP} [_{TP2} laoren bian huai] le]]];
 Neg be old.people become bad LE
 er [_{TP3} shi [_{S.AspP2=CP} [_{TP4} huairan bian lao] le]]].
 but be bad.guy become old LE
 ‘It is not the case that elder people become bad guys but the case that bad guys are getting old.’

An additional argument in favor of the claim that the *shi* ‘be’ in *bu-shi* ‘not.be’ takes a clausal complement is based on the fact that the clausal complement can often be introduced by *shuo* ‘say’ which is generally analyzed as an overt complementizer in Chinese (cf. Su 2004; Simpson and Wu 2002; Hsieh and Sybesma 2011). For instance,

- (25) a. [_{TopP} Zhe-ge shijie ne, [_{TP1} bu shi [_{CP} shuo
 this-Cl world NE not be say
 [_{TP2} ni you qian jiu yiding neng guo-de hen hao]]]].
 you have money then certainly can live-DE very well
 ‘As for this world, it is not the case that you can live well if you have money.’
 b. [_{TopP} Zhangsan, [_{TP1} bu shi [_{CP} shuo [_{OnlyP}
 Zhangsan not be say
 [_{TP2} pro/ta zhi hui du shu] eryi]], er shi shuo
 he only can read book ERYI but be say
 ta ye yinggai chou yidian shijian duanlian shenti.
 he also should take little time train health
 ‘As for Zhangsan, (I) do not mean that he only knows how to study, but that he should at least take some time for sport.’

3 Example (24) clearly shows that *shi* ‘be’ in this case is not the focus use of *shi* in bare *shi* ‘be’ constructions, such as in (i):

(i) Shi Zhangsan chi-le dangao; bu shi Lisi.
 be Zhangsan eat-Perf cake Neg be Lisi
 ‘It is Zhangsan who ate the cake, not Lisi.’

In this sentence, the sentence-initial *shi* ‘be’ only scopes over the subject *Zhangsan* and the contrastive focus reading is only realized on *Zhangsan*.

In (25), *bu shi* is decomposed as *bu* ‘not’ and *shi* ‘be’. The verb *shi* ‘be’ takes a CP headed by the complementizer *shuo* ‘say’ as its complement. In (25a), *shuo* ‘say’ takes a TP as its complement; whereas in (25b), *shuo* ‘say’ takes an *OnlyP* headed by *eryi* ‘only’ as its complement. In (25a), *zhe-ge shijie* ‘this world’ is a hanging topic, which does not correspond to any gap or *pro* in TP2. In (25b), the matrix topic *Zhangsan* is related to the pronoun *he* inside TP2. In the absence of *he*, a *pro* occupies the subject position.

An anonymous reviewer raises a very interesting question. In (26), the recursiveness of *shi* ‘be’ is quite illicit given my biclausal analysis. However, it should be free of any problem for its recursivity in principle.

- (26) ??/* [_{TopP} Ta [_{TP1} bu shi [_{CP1} [_{TP2} bu tai keneng shi
 he Neg be Neg too possibly be
 [_{CP2} [_{TP3} ta shengbing] le]]]].
 he sick LE

According to my analysis, CP2 is headed by *le*, which takes TP3 as its complement. TP1 and TP2 contain respectively *shi* ‘be’. Given that TP usually does not take another TP as its complement, a CP is necessary between TP1 and TP2. Accordingly, TP1 takes the clause CP2 (containing TP2) as its complement. The subject *ta* ‘he’ moves from the Spec of TP3 to the Spec of TopP and is interpreted as the matrix topic of the entire sentence. Recall that CP is a phase; the movement of the subject *ta* ‘he’ should not violate the Phase Impenetrability Condition (PIC) (see Chomsky 2000, 2001, 2004 for two different versions). There are at least three CP phases in (24) (by temporarily ignoring phases constructed by the light verb phrase [vP]). We can imagine that there is no escape hatch (i.e., empty specifier positions of TopP) between TP1 and TP3. Importantly, the Spec of CP1 cannot be an intermediate landing site for the topicalization of *ta* ‘he’. Therefore, (24) can be ruled out by locality considerations, namely, by PIC (see Pan 2016 for details on how Phasal Agree works for topicalization in Chinese). Alternatively, due to the iterated negation *bu* ‘not’ and the verb *shi* ‘be’, the sentence creates processing difficulties considerably. The ungrammaticality of this sentence can also be due to processing problems related to haplology, as the reviewer suggested.

3. Argument based on alternative questions with a disjunctive operator

3.1 S.AspP

The second argument of Erlewine (2017) in support of the claim that SFPs such as *le* and *eryi* are located in the vP periphery is based on alternative questions involving the disjunctive operator *haishi* ‘or’. Note that *haishi* ‘or’ can only be used in interrogatives. Erlewine uses the sentence in (27) to show that in both

conjunct clauses the sentence-final *le* occurs below the matrix subject *ni* ‘you’. Therefore, the sentence-final *le* cannot be generated as a head in the CP, which is higher than the TP.⁴

- (27) Ni (shi) [xiang jia le] haishi [gen
 you be miss home LE or with
 nanpengyou fenshou le] (ne) ?
 boyfriend break.up LE NE
 ‘Did you start to miss home or break up with your boyfriend?’

To rule out the possibility of treating (27) as a disjunction of two CPs, Erlewine also provides the following ungrammatical sentence to show that the focus marker *shi* ‘be’ cannot precede the subject *ni* ‘you’ in the first disjunct.

- (28) * Shi [ni_j xiang jia le] haishi [*pro*_j gen
 be you miss home LE or with
 nanpengyou fen shou le] (ne) ?
 boyfriend separate hands LE NE
 Intended: ‘Did you start to miss home or break up with your boyfriend?’

In fact, there is an alternative way to interpret this fact. In (27), *shi* ‘be’ can be analyzed as a true verb located in a higher TP, which takes the entire DisjP as its complement. The matrix subject must occur in a higher topic position, for reasons that are explained immediately below.

Let us first examine the following sentence, which is based on Erlewine’s illustration in (27):

- (29) a. My bracketing according to my analysis
 [_{TopP} Ni_j [_{DisjP} [_{TP1} shi [_{S.AspP1=CP1} [_{TP2} *pro*_j xiang jia] le]]]
 you be miss home LE
 [_{Disj} haishi [_{TP3} shi [_{S.AspP2=CP2} [_{TP4} *pro*_j gen nanpengyou
 or be with boyfriend
 fen shou] le]]]]]?
 separate hands LE
 ‘As for you, is it the case that you miss home or is it the case that you broke up with your boyfriend?’

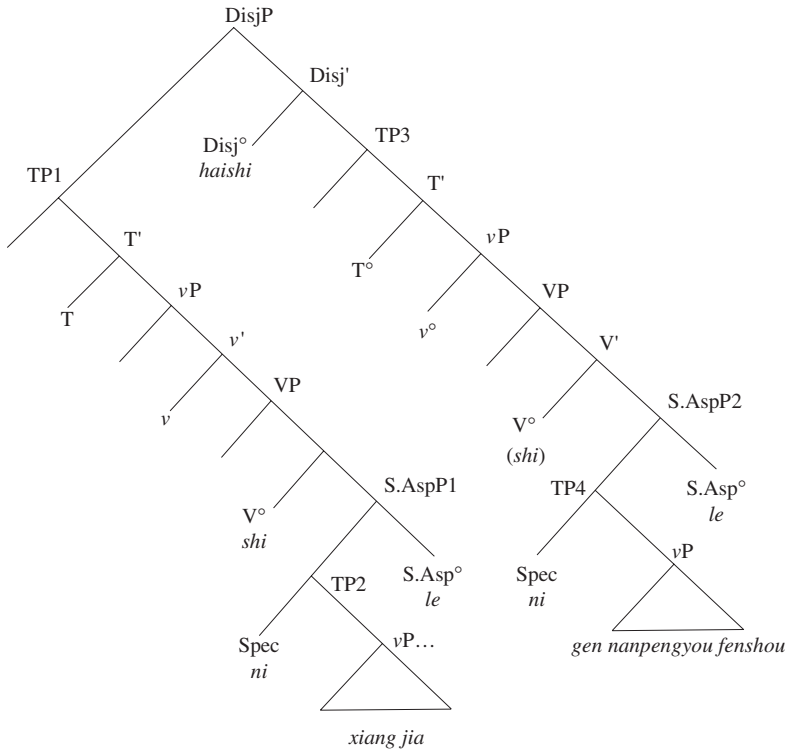
4 There are also analyses that treat SFPs themselves as disjunctive operators that coordinate two identical TPs in their specifier position and complement position, respectively. The TP in the complement position is further deleted under an identical condition (cf. Bailey 2012–2015; Tang 2015a, 2015b, 2016).

Under my current analysis of (29), the sentence in (28) of Erlewine can also be ruled out. Since the subject *ni* ‘you’ in the first conjunct S.AspP1 is not in the matrix topic position, *ni* ‘you’ is not high enough to license the *pro* in the second conjunct S.AspP2; therefore, the resulting sentence is ungrammatical. Once the second conjunct S.AspP2 has an overt subject, the sentence becomes grammatical, as illustrated in (30–31):

(30) My bracketing according to my analysis

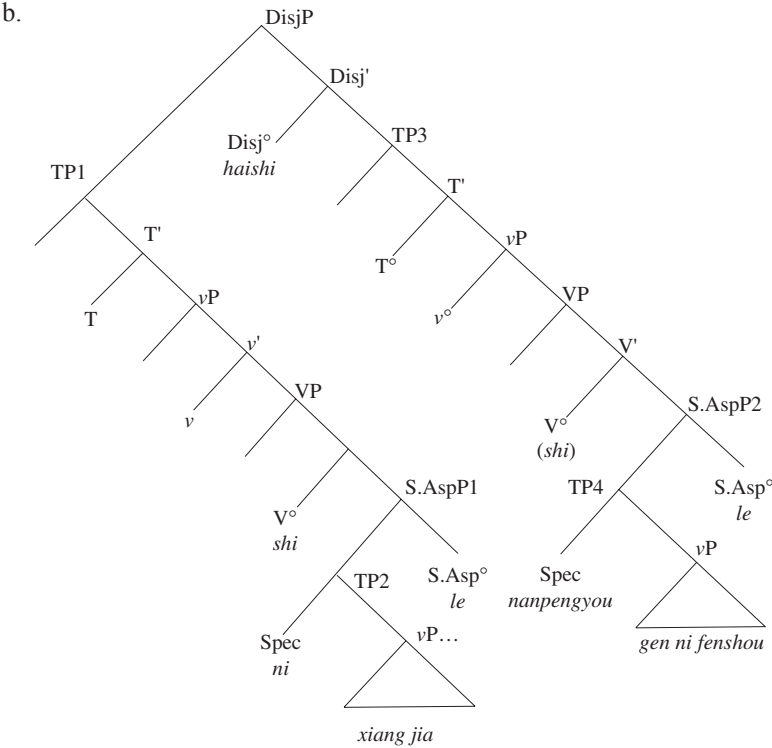
- a. [_{DisjP} [_{TP1} Shi [_{S.AspP1=CP1} [_{TP2} **ni**_j xiang jia] le]]]
 be you miss home LE
 [_{Disj'} haishi [_{TP3} (shi) [_{S.AspP2=CP2} [_{TP4} **ni**_j gen nānpēngyǒu
 or be you with boyfriend
 fēn shǒu] le]]]]?
 separate hands LE
 ‘Is it the case that you miss home or is it the case that you broke up with
 your boyfriend?’

b.



- (31) a. [_{DisjP} [_{TP1} Shi [_{S.AspP1=CP1} [_{TP2} **ni** xiang jia] le]]]
 be you miss home LE
 [_{Disj'} haishi [_{TP3} (shi) [_{S.AspP2=CP2} [_{TP4} **nānpēngyǒu** gen ni
 or be boyfriend with you
 fēn shǒu] le]]]]?
 separate hands LE

‘Is it the case that you miss home or is it the case that your boyfriend broke up with you?’



(30a, b) and (31a, b) represent two different cases, both of which share the same core analysis. The entire sentence is analyzed as a DisjP headed by the disjunctive operator *haishi* ‘or’. *Haishi* coordinates two TPs, i.e., TP1 and TP3. TP1, which is projected based on the verb *shi* ‘be’, is paraphrased as ‘it is the case that’. The same analysis applies for the second conjunct TP3 involving a null verb *shi* ‘be’. In (30a, b), TP2 and TP4 contain, respectively, an overt subject *ni* ‘you’ and a co-referential relation can be established between them. The sentence is grammatical. Alternatively, in (31a, b), TP2 contains an overt subject *ni* ‘you’ and TP4 also contains an overt subject, but a different one, *nanpengyou* ‘boyfriend’. The resulting sentence is still grammatical. Therefore, my analysis shows that the original ungrammatical sentence in (28) has nothing to do with the relevant conjunctive clause, which is a TP or a CP, but to do with the question whether or not the subject in the second conjunct clause is correctly licensed.

3.2 OnlyP

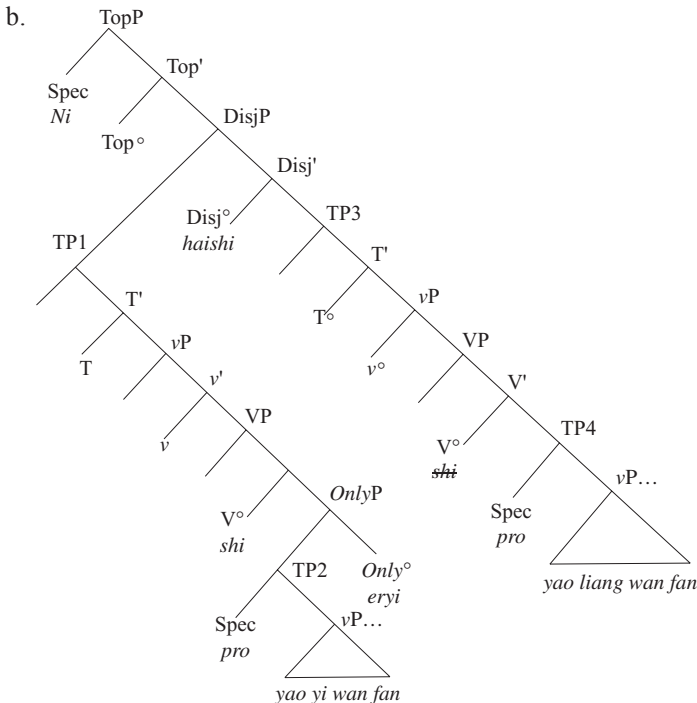
Similarly, Erlewine uses the sentence in (32) to show that the sentence-final *eryi* occurs below the matrix subject *ni* ‘you’ and that *eryi* cannot be generated as a

head in the CP that is higher than the TP. Concretely, the sentence-final *eryi* ‘only’ in the first conjunct can only be associated with *yi-wan fan* ‘one bowl of rice’ but not with the subject *ni* ‘you’. In this sense, the sentence-final *eryi* ‘only’ cannot be generated as the head of a CP that is higher than TP.

- (32) Ni (shi) [yao yi wan fan eryi] haishi
 you be want one bowl rice ERYI or
 [yao liang wan fan] (ne) ?
 want two bowl rice NE
 ‘Do you want only one bowl of rice or two bowls of rice?’

As I argued in the previous section concerning the sentence-final *le*, *shi* ‘be’ in (32) can be analyzed as a true verb, which is located in a higher TP. This TP then takes the *OnlyP* [*yao yi-wan fan eryi*] ‘want one bowl of rice only’ as its complement. In my analysis, (32) can be parsed as follows:

- (33) a. My bracketing according to my analysis
 [_{TopP} Ni_j [_{DisjP} [_{TP1} shi [_{OnlyP=CP} [_{TP2} *pro*_j yao yi wan fan]
 you be want one bowl rice
 eryi]]] [_{Disj'} haishi [_{TP3} shi [_{TP4} *pro*_j yao liang wan fan]]]]]?
 ERYI or be want two bowl rice
 ‘As for you, is it the case that you want only one bowl of rice or two bowls
 of rice?’



In this analysis, the subject *ni* ‘you’ is treated as a topic that occupies the specifier position of the matrix TopP. The TopP takes the DisjP headed by the disjunctive question operator *haishi* ‘or’ as its complement. The disjunctive operator *haishi* ‘or’ coordinates two TPs, i.e., TP1 and TP3. The verb *shi* ‘be’ is treated as the core component of TP1, which is paraphrased as ‘it is the case that’. TP1 takes the *OnlyP* headed by the sentence-final *eryi* ‘only’ as its complement. *OnlyP* takes TP2 as its complement. Note that the subject in TP2 has been topicalized. In the original specifier position of TP2, there is a null subject *pro*, which can be controlled by the matrix topic *ni* ‘you’.

In the second conjunct, nothing prevents us from assuming that there is a covert *shi* ‘be’ that projects the TP3 and that the pronunciation of this *shi* ‘be’ can be reduced due to the presence of *-shi* in the disjunctive question operator *hai-shi* ‘or’. The TP3 headed by the covert *shi* ‘be’ then takes TP4 as its complement. The subject position in TP4 is also occupied by a null *pro* controlled by the matrix topic *ni* ‘you’.

4. Argument based on subject

4.1 S.AsPP particles

Another argument that Erlewine (2017) uses to show that SFPs such as *le* and *eryi* are located in the vP periphery is based on the indefinite reading of *wh*-words in Chinese. Li (1992) observes that the sentence-final *le* can only license the indefinite reading of the *wh*-object but not that of the *wh*-subject. For instance,

- (34) a. Ta kandao shenme
 he see what
 (i) ‘What did he see?’
 (ii) *‘He saw something.’
 b. Ta kandao shenme le
 he see what LE
 (i) ‘What did he see?’
 (ii) ‘He saw something.’

In (34a), when the sentence is not followed by the final particle *le*, the *wh*-word *shenme* ‘what’ can only have an interrogative reading but not an indefinite reading; accordingly, the sentence can only be interpreted as a real question. By contrast, when the same sentence is followed by the final particle *le*, as in (34b), both an interrogative reading ‘what’ and an indefinite reading ‘something’ are available for the relevant *wh*-word. In this case, the sentence can either be interpreted as a question or as a declarative sentence. According to Erlewine, *le* scopes over the object *wh*-word *shenme* ‘what’ in both sentences by providing them with an indefinite reading.

In contrast to the *wh*-object, the *wh*-subject cannot get an indefinite reading in the same context with the SFP *le*. Similar to (34b), (35a) is also ambiguous between

an interrogative reading and a declarative reading; the *wh*-word *shenme* is either interpreted as a question word ‘what’ or as an indefinite ‘something’.

- (35) a. Ta shuo shenme le
 he say what LE
 (i) ‘What did he say?’
 (ii) ‘He said something.’
 b. {Shei / Shenme ren} shuo hua le
 who what person say words LE
 (i) ‘Who spoke?’
 (ii) *‘Someone spoke.’

However, (35b) shows that the *wh*-subject such as *shei* ‘who’ and *shenme ren* ‘what person’ cannot get an indefinite reading in the same context containing the sentence-final *le*. Erlewine uses this example to show that *le* cannot scope over the subject and accordingly, *le* must be generated in a position lower than the subject. As a result, *le* cannot be analyzed as one of the C heads since the sentence-final C must take scope over the entire TP.

However, this argumentation is not entirely convincing for several reasons. Crucially, it is not the SFP *le* that directly binds the relevant *wh*-word as a variable by providing the latter with an indefinite reading; instead, it is the existential quantifier triggered by *le* that binds the *wh*-word as a variable. In Chinese, the existential closure applies at the I-bar level by excluding the subject (Huang 1982). In this respect, it is not surprising that the *wh*-subject in (35b) cannot get an interrogative reading because this *wh*-subject is not under the scope of the existential quantifier triggered by the final particle *le*.

- (36) (= 35b)
 [_{CP} [{Shei / Shenme ren} \exists shuo hua] le]
 who what person say words LE
 (i) ‘Who spoke?’
 (ii) *‘Someone spoke.’

It is very important to make a distinction between the scope of the sentence-final *le* and the scope of the existential quantifier triggered by *le*. The final *le* scopes over the entire TP by providing this TP with a sentential aspect reading. By contrast, the existential quantifier is only introduced at the T’ or I’ level, and this quantifier must bind a variable inside its scope; otherwise, the relevant sentence will be ungrammatical due to the vacuous quantification. As a result, any variable occurring higher than T’ or I’ will not be able to get an existential reading.

For exactly the same reason, as explained by Huang (1982), in a *yes–no* question formed by the SFP *ma*, only the *wh*-object can get an indefinite reading, but not the *wh*-subject. This contrast is illustrated in the following examples:

- (37) a. [_{CP} [_{TP} Ni $\exists_{(x)}$ chi-le shenme_(x)] ma]?
 you eat-Perf what $Q_{yes/no}$
 ‘Did you eat anything?’
 b. * [_{CP} [_{TP} Shei_(x) $\exists_{(x)}$ xiang kan dianying] ma]?
 who want see movie $Q_{yes/no}$
 Intended: (‘Does anybody want to see a movie?’)
 c. [_{CP} [_{TP} You shei xiang kan dianying] ma]?
 have who want see movie $Q_{yes/no}$
 ‘Is there anyone who wants to see a movie?’

(37a) shows that the *yes–no* question particle *ma*, analyzed as a complementizer, triggers the existential quantifier, which is generated at the T’ level. The \exists quantifier binds the in situ *wh*-word *shenme* ‘what’ as a variable and gives it an indefinite reading. As a result, the entire sentence is interpreted as a *yes–no* question.

In (37b), since the existential quantifier triggered by the final particle *ma* is generated at the T’ level, it does not take scope over the subject, which is merged in the specifier position of the TP. Therefore, the *wh*-subject *shei* ‘who’ cannot get an existential reading. The ungrammaticality of the sentence in (37b) is due to the incompatibility between a *yes–no* question and a *wh*-question in that these two question types cannot co-occur in the same sentence. On the one hand, the SFP *ma* requires that the entire sentence must be interpreted as a *yes–no* question and, on the other hand, not being under the scope of the existential quantifier, the *wh*-subject *shei* ‘who’ must be interpreted as a true interrogative word. Since the same sentence cannot be interpreted simultaneously both as a *yes–no* question and as a *wh*-question, the resulting sentence is ungrammatical.

In (37c), when the subject is preceded by the existential verb *you* ‘there be’, the *wh*-subject is under the scope of *you* and can therefore get an existential reading. Accordingly, the entire sentence is interpreted as a *yes–no* question. A similar situation is also observed for preverbal *wh*-adjuncts, as shown in (38):

- (38) a. [_{CP} [Ni $\exists_{(x)}$ yijing zai shenme difang_(x)
 you already at what place
 chi-guo fan le] ma]?
 eat-Exp meal LE $Q_{yes/no}$
 ‘Did you have your meal somewhere?’
 b. *Zai shenme difang_(x) [_{CP} [ni $\exists_{(x)}$ yijing
 at what place you already
 chi-guo fan le] ma]?
 eat-Exp meal LE $Q_{yes/no}$
 (‘Did you have your meal somewhere?’)

In (38a), the *wh*-adjunct *zai shenme difang* ‘at what place’ is generated lower than the existential quantifier triggered by the *yes–no* question particle *ma*; therefore, *zai shenme difang* can get an existential reading ‘at some place’. By contrast, when

the *wh*-adjunct is topicalized, it is out of the scope of the existential quantifier (cf. 38b); as a result, it no longer gets an existential reading. Again, *zai shenme difang* in (38b) can only be interpreted as a true question phrase ‘at what place’; simultaneously, the final particle *ma* forces the entire sentence to be interpreted as a *yes–no* question. Therefore, the sentence becomes ungrammatical due to the impossible co-occurrence of the *wh*-question and the *yes–no* question.

Even though *ma* cannot license the indefinite reading of the *wh*-subject, *ma* is still analyzed as a complementizer that scopes over the entire TP. I must emphasize the importance of making a distinction between the scope of the sentence-final *ma* and the scope of the existential quantifier triggered by *ma*. The final *ma* scopes over the entire TP; as a result, the entire sentence is interpreted as a direct *yes–no* question with an interrogative force. However, the existential quantifier is introduced at the T’ level, and this quantifier must bind a variable inside its scope. As a result, *wh*-subject and some preverbal *wh*-adverbials cannot get an existential reading.

Accordingly, the argument based on the unavailability of the indefinite reading for the *wh*-subject cannot convincingly show that the final particle *le* is generated below the subject inside the TP. It is worthwhile noting that the *yes–no* question particle *ma* is considered as a higher SFP by Paul (2014, 2015) and Pan (2015, 2019). If the analysis of Erlewine (2017) were on the right track, then *ma* should also be treated as a vP-level particle. Clearly, this contradicts many existing works on *ma*.

4.2 Exclusive focus particle *eryi* ‘only’

Erlewine (2017) also discusses the scope of *eryi* ‘only’ and suggests that its scopal interaction with the subject of a sentence provides a further argument that this SFP is structurally lower than TP. (39) is presented as an ungrammatical sentence in Erlewine (2017). According to the author, the subject *wo (yi ge ren)* ‘I (one person)’ cannot receive an exclusive focus reading, which in turn shows that the sentence final *eryi* ‘only’ cannot take scope over the subject.

- (39) * [Wo (yi ge ren)]_F hui nian yingwen eryi.
 I one Cl person can read English only
 Intended: ‘Only [I (one person)]_F can read English.’
 → No one else can.

In fact, according to my native informants, the sentence in (39) is bad for another independent reason. My informants uniformly point out that (39) is bad due to the lack of *zhi you* ‘there is only’ in the sentence-initial position, which has nothing to do with the scope of the sentence-final *eryi* ‘only’. Crucially, without the sentence-final *eryi* ‘only’, the sentence still remains ungrammatical, as shown in (40) below:

- (40) * [Wo (yi ge ren)]_F hui nian yingwen.
 I one Cl person can read English
 Intended: (‘Only [I (one person)]_F can read English.’)

(41a) shows that only when *zhi you* ‘there is only’ is inserted in front of the subject *wo* ‘I’, the sentence with *eryi* ‘only’ becomes fully grammatical, which remains independent of the fact whether the sentence-final *eryi* ‘only’ is present or not, as shown in (41b):

- (41) a. Zhi you wo yi ge ren hui nian yingwen eryi.
 only there.be I one Cl person can read English ERYI
 (Lit.) ‘There is only I who can read English. (No one else can.)’
 b. Zhi you wo yi ge ren hui nian yingwen.
 only there.be I one Cl person can read English
 (Lit.) ‘There is only I who can read English. (No one else can.)’

Erlewine (2017) also mentions in a note that *zhi you* ‘there is only’ can save the sentence but he explains that the presence of the operator *zhi* ‘only’ can license the subject. However, the real problem is that sentences like (39) without the sentence-final *eryi* ‘only’ are already ungrammatical themselves in the first place. Therefore, the ungrammaticality of (39) is not due to the fact that *eryi* ‘only’ cannot scope over the subject but to the fact that the subject needs an independent licenser. Here is another example. The presence of *zhi you* ‘there is only’ is obligatory to make the relevant sentence grammatical.

- (42) a. *Wo yi ge ren renshi lu.
 I one Cl person know way
 Intended (‘I’m the only one who knows the way.’)
 b. *Wo yi ge ren renshi lu eryi.
 I one Cl person know way ERYI
 Intended (‘I’m the only one who knows the way.’)
 c. Zhi you wo yi ge ren renshi lu.
 only there.be I one Cl person know way
 ‘There is only I who know the way. (No one else knows.)’
 d. Zhi you wo yi ge ren renshi lu eryi.
 only there.be I one Cl person know way ERYI
 ‘There is only I who know the way. (No one else knows.)’

(42a) is ungrammatical because of the lack of *zhi you* ‘there is only’ at the beginning of the sentence. (42b) shows that the same sentence with the sentence-final *eryi* ‘only’ still remains ungrammatical for exactly the same reason: the subject is not licensed by *zhi you* ‘there is only’. (42c) shows that when *zhi you* ‘there is only’ is placed in front of the subject *wo* ‘I’, the original sentence in (42a) becomes grammatical. The same observation goes for (42d). Again, the crucial point made on the basis of these examples is that the reason why (40) is ungrammatical is not that *eryi* ‘only’ cannot scope over the subject *wo yi ge ren* ‘I (one person)’ but that a subject like *wo yi ge ren* ‘I (one person)’ always needs a closer licenser such as *zhi you* ‘there is only’.

Also, as pointed out at the beginning of this section, it is often the case that *eryi* ‘only’ does not take scope over a specific constituent but over the entire event

(i.e., TP), and in this case, *eryi* ‘only’ can be roughly paraphrased as ‘it is only the case that...’.

- (43) [_{TP} Zhangsan diu-le qianbao]_F *eryi*,
 Zhangsan lost-Perf purse ERYI
 keshi Lisi que diu-le huzhao.
 but Lisi however lost-Perf passport
 ‘It is only the case that Zhangsan lost his purse. However, Lisi lost his passport.’

5. Conclusion

The peripheral domain of CP in Chinese is composed of functional projections of different types, which are arranged according to a strict order: sentential aspect such as *le* < exclusive focus *eryi* < illocutionary force particles < nonstandard questions < particles related to the speaker’s attitude and opinion. This order is conditioned by the “Subjectivity Scale Constraint” proposed by Pan (2015, 2019): the higher a functional projection is, the more subjective its interpretation becomes and the more difficult it is for such a projection to be embedded. Importantly, these functional projections are located in the CP domain, which are therefore higher than TP systematically. Erlewine (2017) argues that some low SFPs, such as the sentential *le* and the focus particle *eryi*, are actually located in the peripheral domain of vP, thus lower than TP. In this article, I go over three main arguments advanced in Erlewine’s study and show that the “low” scope of particles such as *le* and *eryi* is only apparent at the surface. I offer an alternative analysis by maintaining the idea that SFPs such as *le* and *eryi* are still C heads and take scope over the entire TP. My proposal relies on the following analysis. First, since low CP projections, such as sentential aspect and the exclusive focus, are not directly linked to the speaker’s subjective opinion, they can appear in embedded clauses (see Pan 2015, 2019, for details). Second, *shi* ‘be’ in the negative form *bu shi* ‘not be’ can be analyzed as an independent verb, which can take a clausal complement. That is why when this clausal complement CP is headed by SFPs such as *le* or *eryi*, it looks like *le* or *eryi* takes a scope lower than *bu shi* ‘not be’. Third, the sentence-initial determiner phrase (DP) cannot be analyzed as the real subject of the verb *shi* ‘be’ but must be analyzed as the matrix topic of the entire sentence and, as a result, this topic DP is syntactically higher than the CP headed by *le* or *eryi*. This also makes it look like that *le* or *eryi* takes scope lower than the subject. Fourth, the *wh*-subject cannot get an indefinite reading in a sentence with a final particle *le* because the \exists -closure triggered by *le* applies at the I’-level by excluding the subject systematically (Huang 1982). The \exists -quantifier, which is introduced in a position lower than the surface subject position, cannot bind the *wh*-subject as a variable. The position where \exists is generated remains independent of whether the \exists -closure is triggered by low particles, such as *le*, or by high particles, such as the *yes–no* question particle *ma*. Therefore, my analysis supports the claim that the low peripheral particles *le* and *eryi* are still in the CP domain, thus higher than TP.

In fact, there are principled arguments and counterarguments to make a distinction between the ν P periphery and the CP periphery; however, there are generally no principled arguments or counterarguments to make a distinction between the TP periphery and the CP periphery. Recall that the sentence-final *le* is analyzed as a TP element that is located in the periphery of TP by Tang (1998). A very common practice in the generative literature is to treat the entire CP as the peripheral domain of TP. This is a general consideration due to the fact that in many languages, it is still an issue whether sentence-initial modality-related elements should be treated as peripheral elements of TP or of CP. A similar situation exists for the sentential *le* in Chinese, which is why *le* can be analyzed as an element located in the TP periphery (cf., Tang 1998). Moreover, sentential adjuncts also pose similar problems. Sentential adverbials such as *generally speaking* are normally analyzed as adjuncts inside the TP domain, in the periphery of TP (higher than the subject); scholars such as Paul (2015) analyze them as topics in the CP domain. This issue still remains open; however, in the present paper, I take a traditional view that the entire CP is treated as the periphery of TP.

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漢語句末助詞表層窄域的句法推導：對 Erlewine (2017) 的回應

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提要

Erlewine (2017) 通過比較漢語左緣結構裡某些位置較低的句末助詞（如“了”和“而已”）與主語及 vP 內部某些功能詞的轄域寬窄而提出這些助詞其實位於 vP 範圍內，因而低於補詞層（CP）。本文反駁了 Erlewine 一文的主要論據。首先，否定成分“不是”中的“是”應該分析為一個能帶子句的獨立調詞。當“是”正好帶了一個由“了 / 而已”為中心語的子句 CP 時，這二者其實並不處於同一層次的子句內，從而就造成了句末助詞似乎低於否定成分“不是”的假象。其次，句首的 DP 並不能作調詞“是”的真實主語而必須分析為整個句子的話題成分，這樣又造成了“了”和“而已”的轄域似乎低於主語的假象。第三，處於句首的疑問短語不能得到不定解讀是因為“了”引出的存在算子 \exists 只能處於低於主語的位子，因此 \exists 不能將主語位置上的疑問短語約束為變量，從而這個證據並不能證明句末“了”一定低於主語。即使較高的句末助詞“嗎”引出的 \exists 算子仍然是低於主語位置的（Huang 1982）。因此，本文的分析能夠說明 Erlewine 一文中似乎能證明“了”和“而已”低於 CP 的證據其實都是表層假象，而事實上二者仍然是位於 CP 的範圍內而並非存在於 vP 層裡。

關鍵詞

句末助詞，左緣結構，製圖理論，轄域，漢語

