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On Topic/Focus Agreement and Movement

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Introduction

Chinese is the so-called isolating language or sometimes it is termed the “cool language” (Huang 1984) with respect to agreement and movement. In this paper, I would like to discuss three apparently unrelated phenomena and try to subsume them into general conditions on agreement and movement.

1 Three Apparently Unrelated Phenomena

The first phenomenon is the “discourse *pro*-drop”. That is, while on the one hand Chinese allows its subjects and objects to be omitted as in (1), unlike English in (2), on the other hand it does not employ rich morphological marking to restore its missing elements as in (3), unlike Italian in (4).

- (1) a. *e lai le.*
 come Perf.
 ‘[He] has come.’
 b. *Ta mai e le.*
 he buy Perf.
 ‘He has bought [it].
- (2) a. *Has come.
 b. *He has bought.
- (3) (wo/ni/ta/women/nimen/tamen) shuo
 I/you.sg/he/we/you.pl/they speak

- (4) (io) parlo ‘I speak’
 (tu) parli ‘you.sg speak’
 (egli) parla ‘he/she speak’
 (noi) parliamo ‘we speak’
 (voi) parlate ‘you.pl speak’
 (essi) parlano ‘they speak’

The second phenomenon is the *wh*-construal. That is, while English overtly moves its *wh*-items to the sentence-initial position to take the scope as in (5), Chinese generally does not (6).

- (5) Whom_i does he like *t*_i?
- (6) Ta xihuan shei?
 he like whom
 ‘Whom does he like?’

Unless under certain special context, e.g., D-linking or contrastive focus, can Chinese *wh*-items undergo overt movement as in (7) (Wu 1999).

- (7) a. Shei_i/Na-ge-ren_i [ni zui xihua *t*_i]?
 which-CI-person you most like
 ‘Who/Which person do you like most?’
 b. Shenme-dongxi_i/Na-dao-cai_i [ta mei chi *t*_i]?
 What-thing which-CI-dish he not eat
 ‘What/Which dish didn’t he eat?’

The third phenomenon is the object preposing mechanism which is quite contrary to the *wh*-movement. That is, while English tends not to prepose its objects as in (8) and (10), Chinese is free to do so as in (9) and (11). The preposing can be further distinguished according to the landing site. (9) targets the IP-internal, preverbal position while (11) targets the IP-external, CP-peripheral position.

IP-internal preposing

- (8) a. *He the book_i returned *t*_i.
 b. *He even the book_i returned *t*_i.
- (9) a. [_{IP}Ta shu_i [_{VP} huan *t*_i] le].
 he book return Perf.
 ‘He returned the book.’

- b. [IP Ta lian shu_i dou [_{vP} huan *t*_i] le].
he even book all return Perf.
'He even returned the book.'

IP-external preposing

- (10) a. ?The book_i, he has returned *t*_i.
b. ??Even the book_i he has returned *t*_i.

- (11) a. [_{CP} Shu_i [_{IP} ta huan *t*_i le]].
book he return Perf.
'The book, he has returned (it).'
- b. [_{CP} Lian shu_i [_{IP} ta dou huan *t*_i le]].
even book he all return Perf.
'Even the book he has returned (it).'

The aim of this paper is to suggest that the above paradigm is not coincident and can be reduced to general conditions on agreement and movement. Specifically, following Miyagawa (2010), I will show that the topic/focus feature plays a crucial role with respect to EPP licensing in the agreementless languages such as Chinese, in contrast to the phi-features in the agreement languages.

2 Deriving Definite/Focus Interpretation

It is well-known that being an agreementless language Chinese typically has to resort to discourse context to recover its empty subjects/objects.

- (12) a. Speaker A: Zhangsan lai le ma?
Zhangsan come Perf. Q
'Has Zhangsan come yet?'
- b. Speaker B: *e* lai le.
come Perf.
'[He] has come.'
- (13) a. Speaker A: Na-ben shu zhide du le.
that-CI book worth read Perf.
'That book is worth reading.'
- b. Speaker B: Wo yijing huan *e* le.
I already return Perf.
'I've already returned [it].'

In other words, their referents must be "old", presupposed, or "given" in the discourse or commonly assumed in the knowledge background. They are definite

or specific.¹ Therefore, in a scenario where speaker A and speaker B are talking about a painting in an art exhibition, a following out-of-the-blue utterance like (14a) is weird.

- (14) a. Speaker A: #Lai le.
 come Perf.
 ‘[He] came.’
 b. Speaker B: Shenme?
 what
 ‘What?’

One way to test its definiteness/specificity is via a certain modal construction. In Chinese when the modal construction involves an indefinite subject as in (15a), the subject is exclusively interpreted as nonspecific (Tsai 2001). Therefore, a follow-up null subject utterance in (15b) is awkward.

- (15) a. San-ge ren tai-de-chi yi-tai gangqin.
 three-Cl person lift-DE-up one-Cl piano
 ‘Three (nonspecific) men can lift up one piano.’
 b. #e yiding hen qiangzhuang.
 must very strong
 ‘[They] must be very strong.’

Syntactically, the definite reading can be derived from the functional layers above ν P--either somewhere between IP and ν P as in (16b), or in the CP domain as in (16c) (or InnerTopP for the former and OuterTopP for the latter, Paul 2002). Note that the bare NP in the canonical object position in (16a) can be interpreted as either definite or indefinite, whereas when preposed it must be interpreted as definite as in (16b, c).

- (16) a. Ta huan shu le.
 he return book Perf.
 ‘He returned a/the book.’
 b. [_{IP} Ta shu_i [_{ν P} huan t_i] le]. (=(9a))
 he book return Perf.
 ‘He returned the book.’
 c. [_{CP} Shu_i [_{IP} ta huan t_i le]]. (=(11a))
 book he return Perf.
 ‘The book, he returned (it).’

¹ We do not intend to distinguish definiteness from specificity in this study. As long as the referents are prominent and can be restored from the context, the null subjects/objects can be licensed.

Even the overtly moved wh-items as in (7) denote similar D-linked interpretation.

Meanwhile, Chinese subjects tend to have a strong definite/specific reading. The bare NP subjects in the following examples are always interpreted as definite.

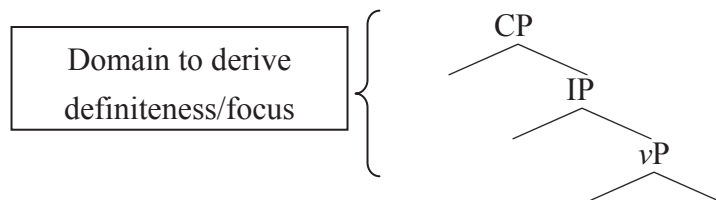
- (17) a. Ren lai le.
 person come Perf.
 ‘The person has come.’
 b. Gou zai jiao.
 dog Prog. bark
 ‘The dog is barking.’

Turning to the focus construction, we observe a similar pattern. In Chinese, when an immediate, overt focus marker is attached to the object phrase, the object phrase must undergo obligatory fronting to either somewhere between IP and vP as in (18a), or in the CP domain as in (18b) (Qu 1994, Shyu 1995, 2001, Zhang 1997, Paul 2002, 2005). Without overt movement, the sentence is bad (18c).

- (18) a. [_{IP}Ta [_{lian} shu]_i dou [_{vP} huan *t_i*]le]. (= (9b))
 he even book all return Perf.
 ‘He even returned the book.’
 b. [_{CP} [_{Lian} shu]_i [_{IP} ta dou huan *t_i* le]]. (= (11b))
 even book he all return Perf.
 ‘Even the book he has returned (it).’
 c. *Ta [_{vP} huan lian shu]le .
 he return even book Perf.
 ‘He returned even the book.’

In this sense, the domain to syntactically derive the definiteness/focus interpretation is the functional layers above vP as shown in (19) (cf. Diesing 1992). I will show that this domain plays a crucial role in licensing the paradigm exhibited in the previous section.

(19)



3 Null Subjects

In this section, I will concentrate on the null subject and show that since it is

highly discourse-oriented and definiteness-related, it must have something to do with the CP domain. More specifically, I will show that it is licensed by the [*u*Top] feature at the matrix C-head which in turn needs to be checked/valued in the Minimalist term (Chomsky 1995).

3.1 The Categorical Status of Null Subject

Huang (1984:556) proposes that the null subject in Chinese can be either a variable when A'-bound or a *pro* when A-bound. Therefore, in the following example (20) when the null subject co-indexes with a discourse topic (which can be empty), it is a variable; when it co-indexes with the matrix subject, it is a *pro*.

- (20) Zhangsan_i suo e_{i/j} hui lai.
 Zhangsan say will come
 'Zhangsan_i said [he_{i/j}] would come.'

However, in (21) the null subject is co-indexing with the topic phrase, so it should in principle be a variable like a *wh*-trace. Yet, this would wrongly rule out the sentences since the null subject is embedded within a complex NP island. Huang (1984, 1989) suggests that the null subject here is more like a pronominal, hence getting rid of island effects.

- (21) a. Zhangsan_i (a), [DP xuduo [CP e_i xie] de shu] dou mai de hen hao.
 Zhangsan Top many write DE book all sell DE very well
 'Zhangsan, many books that [he_i] wrote sell very well.'
 b. Zhangsan_i (a), [DP [CP e_i xihuan nanren] de yaoyan] man-tian fei.
 Zhangsan Top like man DE rumor full-day fly
 'Zhangsan_i, the rumor that [he_i] likes men spreads everywhere.'

Nevertheless, an interesting observation from the minimal pair of (21) suggests just to the opposite. (22) in the following is only minimally different from (21). Yet, unlike (21), when no overt topic phrase is available in (22), these sentences turn out to be awkward. This shows that the null subject here must be a variable, like a *wh*-trace, which is sensitive to island effects.

- (22) a. *[DP xuduo [CP e xie] de shu] dou hen changxiao.
 many write DE book all very sell.well
 'Many books that [he] writes sell well.'
 b. *[DP [CP e xihuan nanren] de yaoyan] man-tian fei.
 like man DE rumor full-day fly
 'The rumor that [he] likes men still spreads everywhere.'

More examples are given below with the adjunct island. Once again, with a topic

phrase, the sentences are fine (23); without it, they are not (24).

- (23) a. Zhangsan_i (a), yinwei e_i mei lai shangxue,
 Zhangsan Top because not come go.to.school
 laoshi_j hen shengqi.
 teacher very upset
 Lit. ‘Zhangsan_i, because [he_i] didn’t come to the school, the teacher_j
 was very upset.’
- b. Zhangsan_i (a), meidang e_i du shu shi,
 Zhangsan Top whenever read book then
 qitade ren_j dou bu neng chu sheng.
 other people all not can make noise
 Lit. ‘Zhangsan_i, whenever [he_i] is studying, the other people_j cannot
 make noise.’
- (24) a. *Yinwei e_i mei lai shangxue, laoshi_j hen shengqi.
 because not come go.to.school teacher very upset
 ‘Because [he_i] didn’t come to the school, the teacher_j was very upset.’
- b. *Meidang e_i du shu shi, qitade ren_j dou bu neng chu sheng.
 whenever read book then other person all not can make noise
 ‘Whenever [he_i] is studying, the other people_j cannot make noise.’

We know that empty topic is possible as in (1a), and long distance binding is also fine as in (20). Why, then, (22) and (24) are out? Why must the null subject in (22) and (24) be a variable whereas in (21) and (23) it must be a *pro*.

Before we move on, let’s recapitulate what we have explored so far: 1) Chinese null subjects need to be licensed by discourse; 2) they are definite (or at least specific); 3) the functional layers above *vP* is strongly related to definiteness/specificity; 4) with an overt topic phrase (in the same sentence), the null subject behaves like a pronominal which is insensitive to island effects; 5) without an overt topic phrase, it behaves like a variable which is sensitive to island effects.

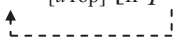
3.2 Licensing Null Subjects

In a similar vein of Miyagawa (2010) I assume the existence of a topic/focus feature at C. In the Minimalist term (Chomsky 1995), the topic feature [*uTop*] at C is presumably uninterpretable and is pending for valuation. I further propose that the null subject in Chinese is licensed by this [*Top*] feature at C.

There are basically two ways to check/value the [*uTop*], i.e., Merge and Move. When an overt topic phrase with interpretable [*iTop*] feature is available, it directly merges to C and checks/values the [*uTop*] feature at C as (25) shows.


(25) [CP TopicP_[iTop] C_[uTop] [IP *pro* ...]].

When the overt topic is not available, the uninterpretable [*uTop*] feature at C probes into the lower domain to find the subject *pro* and attracts it (or a certain feature of it).

(26) [CP C_[uTop] [IP *pro* ...]


This directly accounts for the contrast with respect to island effect between (21) and (22), and (23) and (24) respectively. In this sense, Huang's (1984) categorization on the dual status of the null subject is now recast with the criterion of movement which is determined by the checking/valuation of the uninterpretable [*uTop*] feature at C.

One way to test whether the movement in (26) really exists is via intervention effects. Originally, the intervention effect can serve as a diagnostics on LF-movement (or feature movement) (see, for example, Beck 1996, Beck & Kim 1997, Pesetsky 2000).

(27) * [... *wh_i* ... [QP ... [*t_i*^{LF} ...]]] (adapted from Beck 1996)


In the spirit of Rizzi's (2004, 2006, Endo 2007) Revised Relativized Minimality, we may extend the intervention effect to the blocking of LF-/feature movement of the same sort. We start from the topicalization in (28). In (28b) the embedded object is topicalized to the embedded CP and the sentence is fine.

- (28) a. Zhangsan shuo [Lisi du-guo yuyenxue].
 Zhangsan say Lisi study-Exp. linguistics
 'Zhangsan said Lisi studied linguistics before.'
 b. Zhangsan shuo [CP yuyenxue_k [Lisi du-guo *e_k*]].
 Zhangsan say linguistics Lisi study-Exp.
 'Zhangsan said Lisi studied linguistics before.'

When the embedded subject is missing as in (29a), it can be co-indexed either with the matrix subject Zhangsan as indexed by *i* or the discourse topic, say, Lisi (person name), which is empty in the sentence and is indexed by *j*. Let's focus on the index *j*. Now, when an intervening topic phrase appears at the embedded CP in (29b) the co-indexation of *j* is blocked. Only the *i*-reading surfaces.

(29) a. Zhangsan_{*i*} shuo [*e_{i/j}* du-guo yuyenxue].

- Zhangsan say study-Exp. linguistics
 ‘Zhangsan_i said [he_{i/j}] studied linguistics before.’
- b. Zhangsan_i shuo yuyenxue_k, [e_{i/*j} du-guo e_k].
 Zhangsan say linguistics study-Exp.
 ‘Zhangsan_i said [he_{i/*j}] studied linguistics before.’

This is directly explained by the intervention account. As illustrated in the structure of (30), an intervening TopicP blocks the LF-/feature movement from the embedded subject, triggering intervention effects. This confirms our assumption in (26).

- (30) *_{[CP1 C_[uTop]... [CP2 TopicP [IP_{pro} ...]}
- ↑
 -----↓

Moreover, when an overt topic phrase is present as in (31), the awkward indexation (the *j*-reading) between the empty subject and the topic phrase is remedied again. This is also predicted by our assumption in (25) above. The structure is illustrated in (35).

- (31) Lisi_j (a), Zhangsan_i shuo yuyenxue_k, [e_{*i/j} du-guo e_k].
 Lisi Top Zhangsan say linguistics study-Exp.
 ‘Lisi_j, Zhangsan_i said [he_{*i/j}] studied linguistics before.’

- (32) [_{CP1} C_[uTop], [IP ... [_{CP2} TopicP₂ [IP_{pro} ...]
- ↑
 TopicP₁[_TTop]

4 Topic/Focus-of vs. Subject-of

In Chomsky’s (2005, 2008) recent works, syntactic operations are assumed to be driven by phase heads, i.e., C, and *v**, instead of T or V. The apparent phi-features on T are in fact inherited from C, a phase head. The T-head then probes into the *v*P domain to find its matching Goal, the subject NP, to substantiate the Probe-Goal relation (or Agree) and attracts it to the Spec of TP as a requirement of EPP.

On the other hand, Miyagawa (2005, 2010) suggests that the notion of phi-feature agreement should be more abstract in the discourse configurational languages and can be reinterpreted as topic/focus agreement which triggers movement equivalent to the phi-feature agreement. He provides two examples to support his idea. The first one is from the focus movement. Focus in Japanese functions in the same way as the phi-features in the agreement languages (Miyagawa 2010). Take the Japanese example in (33) as demonstration. The *mo*

‘also’ phrase bears focus stress and is exclusively interpreted as taking scope over negation. Miyagawa suggests that the *mo*-phrase in Japanese should undergo A-movement to Spec,TP because it lacks reconstruction effect (Hasegawa 2005, Miyagawa 2007) and Weak Crossover effect. He then suggests that focus in Japanese functions in the same vein as the phi-features in the agreement languages (for details see Miyagawa 2010).

(from Miyagawa (2010:63) due to Hasegawa (1991, 1994, 2005))

- (33) John-*mo* ko-nakat-ta.
 John-also come-NEG-PAST
 ‘John (in addition to someone else) did not come.’
*not > also, also > not

The second example comes from the topic movement (object scrambling). Miyagawa (2010) suggests that the topic movement exhibits a similar trait of A-movement as the focus movement (cf. Saito 2010). He shows that the scrambling example in (34) is in fact a case of topic movement driven by the topic feature. In (34a) the subject universal phrase scopes over negation whereas in (34b) when the object phrase is scrambled to precede the subject, the subject can take scope under negation. Miyagawa assumes that the reason why it is so is simply because the scrambled object takes the Spec,TP position while the subject universal phrase is forced to remain in *v*P, hence taking scope under negation.²

- (34) a. Zen’in-ga siken-o uke-nakat-ta.
 all-Nom. test-Acc. take-NEG-PAST
 ‘All did not take the test.’
*not > all, all > not
 b. Siken-o_i zen’in-ga t_i uke-nakat-ta.
 test-Acc all-Nom. take-NEG-PAST
 ‘All didn’t take the test.’
not > all, all > not

Chinese is even more transparent in topic and focus movement (see (9) and (11) above). Yet, unlike Japanese, the topic/focus movement does not target Spec,TP/IP. Two tests may be adopted to locate the positions that the topic/focus movement targets. The first one is the anchoring test. Heejeong Ko (2005) points out that downward entailing (DE) subjects like *hensao-ren* ‘few people’ and *meiyou-ren* ‘nobody’ in Chinese can’t undergo topicalization, hence being able to mark the canonical subject position, Spec,TP/IP (for details see Ko 2005). When it occurs with the object preposing (topic/focus movement), the relative positions

² The other reading where the subject still scopes over negation is derived from further movement. For details, please see Miyagawa (2010).

of the preposed object can, then, be easily located. As exhibited in (35b,c) the object preposing targets somewhere lower than the DE subject, which suggests that the object targets somewhere below IP. On the other hand, in (36) the object targets somewhere above IP, i.e., CP. On the other hand, in (36) the object targets somewhere above IP, i.e., CP.

- (35) a. Hensao-ren/Meiyou-ren mei du-guo na-ben shu.
 Few-people/nobody not read-Exp. that-Cl book
 ‘Few people/Nobody didn’t read that book.’
 few/none > not; *not>few/none
- b. [_{IP}Hensao-ren/Meiyou-ren na-ben shu_i mei [_{vP} du-guo *t*_i]].
 few-people/nobody that-Cl book not read-Exp.
- c. [_{IP}Hensao-ren/Meiyou-ren [_{lian} na-ben shu_i] dou mei [_{vP}du-guo *t*_i]].
 few-people/nobody even that-Cl book all not read-Exp.
- (36) a. Na-ben shu_i [_{IP} hensao-ren/meiyou-ren mei du-guo *t*_i].
 that-Cl book few-people/nobody not read-Exp.
 few/none > not; *not>few/none
- b. Lian na-ben shu_i dou [_{IP} hensao-ren/meiyou-ren mei du-guo *t*_i].
 even that-Cl book all few-people/nobody not read-Exp.
 few/none > not; *not>few/none

The second test is the scope test. As exhibited in (36), the subject always scopes over negation. This is different from the Japanese case (cf. (34b)). Following Miyagawa’s (2010) reasoning, the scope test here shows that the IP-external movement here should target CP, instead of IP/TP.

To sum up, following Miyagawa (2005, 2010) I assume that the topic/focus feature has a direct bearing on the topicalization and focus fronting in Chinese. The IP-internal movement targets somewhere between TP/IP and vP and is triggered by the [Top/Foc] feature since the preposed object is either definite or focus. The IP-external movement targets CP, triggered by the same feature.

In other words, the “subject-of” function of the phi-features on T in the agreement languages is reinterpreted as the “topic/focus-of” function of the topic/focus feature in Chinese. This explains the reason why Chinese allows the object preposing mechanism freer than English as in (9) and (11). It also explains why the proposed object is interpretation-driven, i.e., being definite/specific or focused. Meanwhile, given the above demonstration, it follows that the object preposing is less acceptable in English since its phi-features on T works exclusively for the subject and have little to do with [Top/Foc] feature.

5 *Wh*-construal

Let's turn to the last issue, *wh*-construal. This issue has been well studied in the linguistic literature. I will limit the discussion to one approach that fits our purpose here. Tsai (1994) suggests that *wh*-construal should involve two parts—the Q-operator and the *wh*-variable. In English, these two parts stick to each other in the lexicon and the whole chunk then moves to CP to check the Q-feature at C as shown in (37a). In Chinese, however, these two parts are separated from each other. The Q-operator itself can check the Q-feature at C, leaving the *wh*-residue in-situ as shown in (37b). This explains the contrast between English and Chinese in terms of *wh*-movement.

(adapted from Tsai 1994, see also Aoun & Li 1993, Reinhart 1998)

- (37) a. English type: [_{CP} Op_x-*wh*(x) [_{IP} ... *t*_i ...]]
 b. Chinese type: [_{CP} Op_x [_{IP} ... *wh*(x) ...]]

On the other hand, the *wh*-fronting mechanism in Chinese is more of interpretation-driven in the sense that it is triggered by the [Top/Foc] feature (see also Wu 1999), which is akin to the case of object preposing. The fronted *wh*-item in (7) is either D-linked or contrastive focused. It presupposes a particular set of things/people that the *wh*-item questions into. They either serve as the common presupposition background that the speaker and the hearer hold onto (for the D-linked interpretation) or they serve as members of the alternative set that the contrastive focus dwells upon (for the contrastive focus interpretation). Either way, they are different from the Q-/wh-feature checking that the normal *wh*-item involves since the *wh*-fronting in Chinese is overt and is encoded with a strong D-linking or contrastive focus reading.

6 Concluding Remarks

This paper investigates three well-known yet peculiar and seemingly unrelated constructions in Chinese and shows that they involve at least three types of (non-)movement, i.e., overt movement, LF-/feature movement, and non-movement, as illustrated in the following table.

(38)

	<i>[Top/Foc] feature checking</i>
<i>Overt movement</i>	Object preposing (including <i>wh</i>)
<i>LF-/feature movement</i>	Null subject (w/o an overt topic)
<i>Non-movement</i>	Null subject (with an overt topic)

Further, it suggests that these constructions are not coincident and can be subsumed into general conditions on agreement and movement in a parametric way. That is, the three types of (non-)movement can all be subsumed into the checking of [Top/Foc] feature, a prominent feature in the agreementless, discourse-configurational languages such as Chinese. In this sense, we seem to be able to bridge some gaps between the agreement and agreementless languages and bring a step closer to the understanding of typological differences between these languages.

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