

# Alternatives and Focus: Distribution of Chinese Relative Clauses Revisited

Yu-Yin Hsu\*

## 1 Introduction

This paper discusses the syntax and information structure of Chinese relative clauses and presents results of a corpus study and a production experiment. I will argue that Chinese relative clauses structurally express Focus at the pre-demonstrative position as the left-periphery Focus of a nominal, similar to Focus Phrase at the left-periphery of a sentence *à la* Rizzi (1997). This paper will distinguish functions associated with relative clauses occurring at different positions, and provide a unified account to phenomena discussed in previous studies. The result of this paper will prove proposals of the nominal-clausal parallelism (Abney 1987, Chomsky 1970, Giusti 1996, 2006, Aboh 2004) with Chinese data, and that features of information structure have syntactic and interpretive effects, suggesting that such features are active in narrow syntax (Miyagawa 2010).

A complex Chinese nominal expression can have a demonstrative, a numeral, a classifier, and a noun. Relative clauses (hereafter RCs) can occur before a demonstrative (i.e., RC1) or between a classifier and a noun (i.e., RC2), as schematized in (1).

(1) (RC1) – Demonstrative – Numeral – Classifier – (RC2) – Noun

The structure and functions of Chinese RCs have aroused great discussion in the literature. An interesting example has led me to reconsider this phenomenon. Without contexts, it is usually reported by native speakers of Chinese that expressions like (2a) with RC1 seem to suggest that the speaker has more than one father (contrary to the intended interpretation), whereas (2b) with RC2 is more appropriate.<sup>1</sup>

- (2) a. ?\* wǒ [RC1 jiānchí zhù zài xiāngxià de] nà gè lǎobà  
           my insist live at countryside DE that CL father  
           ‘my father, who insists on living in the countryside’  
       b. wǒ nà gè [RC2 jiānchí zhù zài xiāngxià de] lǎobà  
           my that CL insist live at countryside DE father  
           ‘my father, who insists on living in the countryside’

Different judgments of acceptability observed in (2) seems to suggest that RC1 resembles English restrictive relative clauses, and RC2 the non-restrictive. However, the same expression (2a), with the same intended “nonrestrictive” interpretation, is acceptable within contexts. The sentence in (3) presents a contrastive context where RC1 indicates one situation of the denotation of the head noun as an alternative to other potentially possible situations (underlined in the latter part of the sentence).

- (3) Wǒ [RC1 jiānchí zhù zài xiāngxià de] nà gè lǎobà bù  
       my insist live at countryside DE that CL father not  
       zhī shénme-shíhòu yuànyì bāndào chénglǐ hé women zhù!  
       know when willing move city with us live

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<sup>1</sup> The following abbreviations are used in the glosses of examples for specific linguistic items: CL = classifier, PERF = perfective aspect; EXP = experiential aspect; Q-PART = interrogative particles; EMP = emphatic marker; DE = marker of prenominal modifiers.

‘My father, who insists on living in the countryside, [I] don’t know when he will be willing to move to the city to live with us!’

To further explore and to account for examples like (3) and in an attempt to explain the differences between RC1 and RC2, I adopt a joint theoretical-experimental approach in this paper. Before I present the analysis and arguments supporting the proposal (in Section 3), in Section 2, I briefly review proposals and issues in the previous studies, and present a corpus study conducted under the current project. In Section 4, I will report results from a production experiment, which supports the theoretical claims provided here; then, I will briefly conclude this paper in Section 5.

## 2 Previous Studies on Chinese Relative Clauses

Several different analyses of Chinese RCs are proposed in the literature. Following Kayne (1994), Simpson (2003) proposes that all Chinese modifiers of nominal expressions, including adjectives and RCs, are derived by remnant movement from within a CP headed by a particle-*de*, and that RC2 (i.e., in (1) above) is derived from RC1 as a result of demonstrative raising. Nonetheless, Paul (2005) shows that not all modifiers of nominal expressions can function as a predicate, against Simpson’s (2003) remnant movement analysis of modifiers of NP. Ming’s (2010) corpus study of *the Lancaster Corpus of Modern Chinese* (McEnery et al. 2003) reported that 28% of the data involved RC1 but 72% of the data involved RC2, indicating that RC2 is more basic and RC1 is marked (contra Simpson’s proposal that RC2 is derived from RC1). Ming proposes that RC1 serves to identify the referent of noun for grounding (cf. Fox and Thompson 1990) and RC2 is descriptive. Holding a different view and following Chao (1968), Huang (1982) and Constant (2011) argue that RC1 expresses restrictive interpretation, and RC2 expresses descriptive interpretation.

However, in the spirit of Huang’s (1987) analysis of secondary predicate, and based on a definite effect found with RC1 within sentences of unaccusative verbs (like *si* ‘die’ and *lai* ‘come’), Tsai (1994) argues that RC1 should be nonrestrictive, and RC2, restrictive. The definite effect here refers to the fact that usually only indefinite nominal expressions can be located at the underlying object position of an unaccusative verb (4a), but definite or referential nominal expressions cannot (4b-d). Notice that the definite effect disappears at the subject position (5).

- (4) a. Lái-le            yī            gè            rén.  
       come-PERF    one        CL        person  
       ‘[Here] came a person.’  
       b. \*Lái-le        nà            gè            rén.  
       come-PERF    that        CL        person  
       ‘[Here] came that person.’  
       c. \*Lái-le        Zhāngsān.  
       come-PERF    Zhangsan  
       ‘[Here] came Zhangsan.’  
       d. \*Lái-le        tā.  
       come-PERF    she  
       ‘[Here] came her.’  
       (5) { Yī gè rén /            Nà gè rén /    Zhāngsān /    tā }    lái-le.  
           one CL person        that CL person    Zhangsan        she        come-PERF  
           ‘{A person / That person / Zhangsan / She} came.’

Given such effects, a contrast similar to (4a) vs. (4b-d) found between RC1 and RC2 (e.g., (6)) has led Tsai (1994) to propose that RC1 and secondary predicates belong to the same type of descriptive function and thus, it is concluded that RC1 should be non-restrictive and RC2 should be restrictive. Notice also that with or without the demonstrative *na* ‘that’ does not influence the judgment. Unlike Tsai (1994), Based on the same type of contrast shown in (6), and assuming the definite effect (e.g., (4)), Zhang (2006, 2015), instead, proposes that RC1 always expresses specificity and RC2 does not.

- (6) a. \*Zuótiān lái-le [[RC1 cónglái bu xǐzǎo de] (nà) sān gè rén].  
 Yesterday come-PERF ever not bathe DE that three CL person  
 ‘Yesterday (those) three people who never bathed came.’  
 b. Zuótiān lái-le [sān gè [RC2 cónglái bu xǐzǎo de] rén].  
 yesterday come-PERF three CL ever not bathe DE person  
 ‘Yesterday three people who never bathed came.’

Previous proposals have their own theoretical merits, but only illustrate parts of the fact. If we assume that the function of RC1 is to express specificity (cf. Zhang 2006, 2015) or to indicate the referent of noun (cf. Ming 2010), we face some empirical challenges. First, a specific nominal expression can serve as the underlying object of an unaccusative verb. The example in (7) shows that a specific noun *mo-ge-míngxīng* ‘a certain actor’ surfaces at the underlying argument position of *lái* ‘come’. Examples like (7) suggest that the reason why sentences like (6a) are ungrammatical may not be due to the claim that RC1 expresses specificity.

- (7) Zuótiān lái-le mǒu-gè-míngxīng. Wǒ wàngjì tā jiào shénme míngzì láiizhe.  
 Yesterday come-PERF certain-CL-actor I forget he call what name by-the-way  
 ‘Yesterday an actor came. I forget what his name is, by the way.’

Second, Chinese RCs can modify pronouns and proper names, e.g., (8) and (9), respectively (see Lin 2003, Fang 2008, Shi 2010, Lin and Tsai 2015). Facts like these suggest that the main function of RC1 may not be to identify the referent or to express specificity (contra Ming 2010, Zhang 2006, 2015).

- (8) Yī-huì-tóu, wǒ jiù kànjiàn [RC1 zhèng zài yùndòngde] tā.  
 look-back I immediately see right PROG exercise DE him  
 ‘As soon as I turned around, I saw him, who’s doing exercise.’  
 (9) Nǐmen huì kàndào [RC1 pǎo.de gèng kuài de] Liúxiáng.  
 you will see run.DE more fast DE Liuxiang  
 ‘You will see a Liuxiang who runs faster (than the Liuxiang before).’

Currently, the more widely accepted view in the literature is that both RC1 and RC2 are restrictive (see Lin 2003, Del Gobbo 2005, 2010, Shi 2010, Lin and Tsai 2015). If the “restrictive” function is understood as to specify a subset of objects (cf. Keenan and Comrie 1977), both RC1 and RC2 can be conceived as restrictive. Shi (2010) points out that in sentences like (8) and (9), the individual therein can be understood as realizing in a set of different stages, and RCs restrict a subset of stages. For example, sentences like (9) can be interpreted as among different stages of *Liuxiang*, an Olympic Gold medalist, the future stage of *Liuxiang* having a fast running property contrasts with the current stage and the past stage of *Liuxiang* in advancing the speed.

Nonetheless, this widely accepted view of restrictiveness still does not seem to be sufficient in explaining the difference between RC1 and RC2. A corpus study on randomly selected 20k sentences (out of 1,396,133 sentences) from *Academia Sinica Balanced Corpus of Modern Chinese* (Cheng et al. 1996) shows that 415 sentences contain at least one nominal with RCs together with a demonstrative; among them, 21% of the sentences are RC1, and 79% are RC2 (similar to Ming’s (2010) report: RC1, 28%; RC2, 72%), as summarized in (10). No specific difference was found concerning grammatical subject and object roles with respect to the occurrence of RCs (unlike what Ming 2010 reported).

(10) Corpus	RC1	RC2
<i>Academia Sinica Balanced Corpus</i>	21%	79% (415 sentences)
<i>Lancaster Corpus of Modern Chinese</i> (Ming, 2010)	28%	72% (198 sentences)

Given the theoretical concerns and results from corpora, the distributional difference (21% RC1 vs. 79% RC2) still raises a question: What drives the speaker to select one form over the other? To find the answer to this question, I re-examine the syntax and information structure of the phenomenon at issue. In the next section, I present my proposal.

### 3 Relative Clauses at the Nominal Edge as Focus

Given the Focus-Background partition and the alternative semantics of Focus (Rooth 1985, 1992, Krifka 2007), I propose that the main function of Chinese RCs at the left-peripheral, pre-demonstrative position (i.e., RC1) is to express Focus, similar to Rizzi's (1997) proposal of Focus Phrase at the CP left-periphery of a sentence.

According to Krifka (2007), "Focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions"; thus, I argue that the main function of RC1 is to restrict and emphasize one (or a subset of) alternative denoted by the RC as opposed to other (overt or covert) alternatives. Syntactically, RC1 is derived by moving from a modifier position of NP (i.e., RC2) to the Specifier of Focus Phrase projected at the nominal-periphery, i.e., a result of nominal-internal Focus movement. The proposed structure is shown in (11).

- (11) a. [<sub>FocusP</sub> [<sub>RC1</sub>      zuótiān   lái   zhǎo   nǐ   de]<sub>i</sub> [<sub>DP</sub>      nàxiē      [<sub>NP</sub> t<sub>i</sub> xuéshēng ]]]  
    yesterday come   fine   you DE                   those                   student  
    'those students who came to find you yesterday'  
       b. [<sub>FocusP</sub> RC<sub>i</sub> [<sub>DP</sub> ... [<sub>NP</sub> t<sub>i</sub> N ]]]

#### 3.1 Nominal-Internal Movement

This movement analysis is proposed to be within the nominal domain, because the resulting nominal expression as a whole can surface as an object (e.g., (12)) or a subject (e.g., (13)).

- (12) Wǒ rènsī                      [[<sub>RC1</sub>      zuótiān   lái   zhǎo   nǐ   de]      nàxiē      xuéshēng ].  
       I    know     yesterday come   find   you DE      those      student  
       'I know those students who came to find you yesterday.'  
       (13) [[<sub>RC1</sub> Zuótiān   lái   zhǎo   nǐ   de]      nàxiē      xuéshēng]      shì      xīnshēng.  
    yesterday come find   you DE      those      student                   are      freshmen  
    'Those students who came to find you yesterday are freshmen.'

In addition, this proposal of movement analysis is supported by a phenomenon similar to the superiority effect found with *wh*-movement. The superiority effect generally can be found when a sentence contains two *wh*-words, and the one that undergoes *wh*-movement to form a *wh*-question is the one that is the closest to the interrogative-probe C, as demonstrated by the contrast shown in (14). Notice that when the *wh*-words occur individually, each of such *wh*-words can undergo *wh*-fronting to form a *wh*-question, as shown in (15).

- (14) a. Who bought what?  
           b. \*What did who buy?  
       (15) a. Who bought the cake?  
           b. What did John buy?

Concerning Chinese relative clauses, Lin (2008) points out that stage-level RCs (i.e., S-RC) have to precede individual-level RCs (i.e., I-RC) when they both are base-generated in the post-determiner domain modifying the noun (e.g., (16a) vs. (16b)).

- (16) a. na   ge   [[<sub>S-RC</sub> zuotian   meiyóu   lái   de] [<sub>I-RC</sub> hén   xīhuan   shàng   kè   de] xuéshēng]  
    that CL   yesterday not   come DE   very like   go   class DE student  
    'that student who didn't come yesterday, who likes to come to class very much'  
       b. \*na   ge   [[<sub>I-RC</sub> hén   xīhuan   shàng   kè   de] [<sub>S-RC</sub> zuotian   meiyóu   lái   de] xuéshēng]  
    that CL   very like   go   class DE   yesterday not come DE student  
    'that student who didn't come yesterday, who likes to come to class very much'

When one of the RCs in sentences like (16a) needs to be located at the pre-demonstrative position, the stage-level RC can surface there, but the individual-level RC cannot (e.g., (17a) vs. (17b)).

Notice that, both stage-level RCs and individual-level RCs can occur at the pre-demonstrative position, as shown in (18).

- (17) a. [S-RC zuotian meiyoun lai de] na ge [I-RC hen xihuan shang ke de] xuesheng  
 yesterday not come DE that CL very like go class DE student  
 ‘that student who didn’t come yesterday, who likes to come to class very much’  
 b. \*[I-RC hen xihuan shang ke de] na ge [S-RC zuotian meiyoun lai de] xuesheng  
 very like go class DE that CL yesterday not come DE student  
 ‘that student who didn’t come yesterday, who likes to come to class very much’
- (18) a. [S-RC zuotian meiyoun lai de] na ge xuesheng  
 yesterday not come DE that CL student  
 ‘that student who didn’t come yesterday’  
 b. [I-RC hen xihuan shang ke de] na ge xuesheng  
 very like go class DE that CL student  
 ‘that student who likes to come to class very much’

Thus, given the superiority effect, a natural explanation to the contrast shown in (17) would be that when a higher functional head licenses a RC in a pre-demonstrative position, it picks the closest one to value the features, similar to what we found with the *wh*-movement in *wh*-questions in (14); in turn, such examples argue for the nominal-internal movement of RCs in Chinese.

### 3.2 Relative Clause as Focus

Given that RC1 is derived by nominal-internal movement, I show in this section that it is Focus that drives such movement.

Assuming that nominals marked with *only* are Focus expressions (e.g., Hole 2004), we can see that sentences with a Focus operator *zhiyou* ‘only’ associating with the property expressed by an RC show that such a RC is better to occur at the nominal-periphery. Let’s consider a scenario where a director is looking for three students with a peculiar property to play certain roles in his new movie, and the director complains to his casting director (as in (19)), and we can see that using RC1 is felicitous, but using RC2 is not.

- (19) ‘How come you got me these unqualified actors? I have told you ....’  
 a. ?\*[Zhiyou san ge [RC2 conglai-bu xizao de] xuesheng] cai shi wo yao de!  
 Only 3 CL never shower DE student exactly be I want DE  
 ‘Only three students who never take a shower are whom I am looking for!’  
 b. [Zhiyou [RC1 conglai-bu xizao de] san ge xuesheng] cai shi wo yao de!  
 Only never shower DE 3 CL student exactly be I want DE  
 ‘Only three students who never take a shower are whom I am looking for!’

Discourses like (19) show that when a property of a noun expressed by a relative clause is focused, such property needs to be expressed by RC1 (e.g., (19b)), but not RC2 (e.g., (19a)).

The proposal that RC1 expresses Focus at the nominal-periphery is also supported by empirical examination. Below, I summarize findings from a production experiment.

## 4 Relative Clauses as Focus: An Experiment

In a forced-choice questionnaire experiment (N=156), participants who are native speakers of Chinese were asked to choose between RC1 and RC2 to complete a dialogue. Two conditions of contexts were manipulated: a non-Focus condition where RCs modify the whole set, e.g., (20), and a Focus condition where RCs modify one subset contrasting with the other subsets, e.g., (21).

### (20) Non-Focus Condition

A: Zhangsan’s three sons are all lawyers.

B: Yes, I heard that his sons who are teachers are paid very well!

A: No, \_\_\_\_\_ are paid very well!

(a) dang lushi de na san ge erzi  
be lawyer DE that three CL son  
'those three sons who are lawyers'

(b) na san ge dang lushi de erzi  
that three CL be lawyer DE son  
'those three sons who are lawyers'

(21) Focus Condition

A: Among Zhangsan's six sons, three are teachers and three, lawyers.

B: I heard that three sons are paid very well.

A: Those teachers?

B: No, \_\_\_\_\_ are paid very well!

(a) dang lushi de na san ge erzi  
be lawyer DE that three CL son  
'those three sons who are lawyers'

(b) na san ge dang lushi de erzi  
that three CL be lawyer DE son  
'those three sons who are lawyers'

These two conditions were then crossed with four information statuses: declaratives, contrastive-RC, *only*-RC, and answers to *wh*-questions (e.g., (22)). Among all the stimuli, half of the items involved subject extracted RCs and the other half, object extracted RCs.

(22) Examples of four information statuses:

a. Declarative: I heard that Zhangsan's 3 sons who are lawyers are paid very well.

b. Contrastive-RC: A: Zhangsan's 3 sons who are teachers are paid very well.

B: Wrong, those 3 sons who are lawyers are paid very well!

c. Only-RC: A: Firefighters rescued 5 people; 3 were injured, and 2 were not hurt at all.

B: I heard that there were 2 other people who were injured.

A: No. Only those 3 people who firefighters rescued were injured.

d. Wh-questions: A: Who are paid very well?

B: Those 3 sons of Zhangsan who are lawyers are paid very well!

Logistic regression analyses (Hosmer and Lemeshow, 2000; Pampel, 2000) were performed on participants' choosing RC1 or not and the relationship among factors. The overall result shows significant effects of choosing RC1 under the Focus condition ( $p < .001$ ), and when different information statuses were involved ( $p < .001$ ): contrastive ( $p < .001$ ) and *only* ( $p = .022$ ). Foci show significant effects on choosing RC1. No significant effects were found between choosing RC1 and RC2 when no nominal-internal Focus is involved (i.e., in declaratives and answers to *wh*-questions), and no significant effects were found with respect to the choice of RCs and the difference of subject and object grammatical roles.

In other words, the results suggest that the function of RC1 is closely related to Focus within the nominal domain. This in turn supports the current proposal of RC1 as nominal-internal Focus at the periphery, and it provides an explanation to our corpus search which shows that RC1 is more marked – because RC1 is selectively used under specific Focus environments.

## 5 Remaining Issues

If the current proposal is on the right track, other phenomena concerning Chinese relative clauses reported in the literature can receive a unified account as well. Below I present how the proposed analysis explains restrictions on topicalization from within a complex nominal with respect to the occurrence of RC1 and RC2 (Section 5.1), and issues concerning restrictions on the compatibility

of predicate types of RCs (Section 5.2).

### 5.1 PIC and Anti-Locality

Zhang (2015) and Lin and Tsai (2015) point out that constituents after RC1 cannot undergo topicalization, but elements after RC2 can, as exemplified in (23).

- (23) a. \*[Na ge xuesheng]<sub>i</sub>, wo renshi [[<sub>RC1</sub> zuotian lai zhao ni de] t<sub>i</sub>].  
           that CL student I know yesterday come find you DE  
           ‘(As for) that student, I know [the one] who came to look for you yesterday.’  
       b. Xuesheng<sub>i</sub>, wo renshi [na ge [<sub>RC2</sub> zuotian lai zhao ni de] t<sub>i</sub>].  
           Student I know that CL yesterday come find you DE  
           ‘(As for) student, I know that [one] who came to look for you yesterday.’

Recall that the difference between RC1 and RC2 should not be due to specificity or restrictiveness (contra Zhang 2006, 2015; Lin and Tsai 2015). Following the Focus movement analysis proposed in this paper, I propose that the contrast shown in (23) can be accounted for by anti-locality (cf. Bošković 2005) and Chomsky’s (2001) Phase Impenetrability Condition, that is, only the head of a phase and constituents at the edge of a phase can be extracted out of the phase.

Given that Chinese has DP structure (Huang et al. 2009), and that DP is a phase (Citko 2014), it follows that the noun phrase after RC1 cannot be extracted through the left-periphery of DP, because RC1 has been derived by nominal-internal focus movement to the Spec,Focus at the nominal-periphery, as the structure shown in (24).

- (24) \*Xuesheng<sub>i</sub>, wo renshi [<sub>FocP</sub> t<sub>i</sub> [<sub>RC1</sub> zuotian lai zhao ni de] [<sub>Foc</sub> Ø<sub>Focus</sub> [<sub>DP</sub> na ge [t<sub>i</sub>]]]].  
           Student I know yesterday come find you DE that CL  
           ‘(As for) student, I know that one who came to look for you yesterday.’

However, the noun phrase after RC2 can be extracted by passing the edge of DP, like the example (23b) repeated below (modified with the structural representation).

- (23) b. Xuesheng<sub>i</sub>, wo renshi [<sub>DP</sub> t<sub>i</sub> [<sub>D</sub> na ge [<sub>NP</sub> [<sub>RC2</sub> zuotian lai zhao ni de] t<sub>i</sub>]]].  
           student I know that CL yesterday come find you DE  
           ‘(As for) student, I know that [one] who came to look for you yesterday.’

According to the same mechanism, ungrammatical sentences like (23a) (repeated below and modified with the structural representation) can be accounted for in the same way, that is, when RC1 occurs at the edge of DP, no other constituents can be extracted from within the nominal expression. Also notice that moving *na ge xuesheng* ‘that student’ violates anti-locality that movement cannot be too short (cf. Grohmann 2003)

- (23) a. \*[Na ge xuesheng]<sub>i</sub>, wo renshi [<sub>FocP</sub> t<sub>i</sub> [<sub>RC1</sub> zuotian lai zhao ni de] [<sub>Foc</sub> Ø<sub>Focus</sub> t<sub>i</sub>]].  
           that CL student I know yesterday come find you DE  
           ‘(As for) that student, I know [the one] who came to look for you yesterday.’

Thus, examples’ contrast like (23) may not be due to definiteness/specificity effects claimed in the previous studies, but due to the violation of anti-locality; constituents dominated by such a FocP cannot be moved through the edge.

### 5.2 Focus-Background Partition

If the proposal is on the right track, I argue that RCs modifying pronouns and proper names can also receive a unified account.

Lin (2003) argues that both RC1 and RC2 are restrictive, but when a RC is formed by an individual-level predicate, which expresses stable, unchanging, long-term properties, such a RC can have non-restrictive interpretation, and that is why such RCs can modify pronouns or proper names; Lin also argues that when RCs formed by a stage-level predicate, it cannot modify pronouns or proper names, e.g., (25).

- (25) a. Xianglai      jiu      bu      ai      du      shu      de      Xiaoming  
          always      then      not      love      study      book      DE      Xiaoming  
          xiangzai ye      kaishi      du      qi      shu      lai      le.  
          now      also      begin      study      begin      book      come      ASP  
          ‘Xiaoming, who does not love to study, now also has begun to study.’  
          b.\* Zuo zai      caodi      shang      de      Zhangsan      hen      xihuan      chouyan.  
          sit on      grass      above      DE      Zhangsan      very      like      smoke  
          ‘Zhangsan, who is sitting on the grass, likes to smoke very much.’

Arguing against Lin’s (2003) claim that only RCs expressing permanent properties can modify pronouns and proper names, Shi (2010:327) shows that RCs with stage-level predicate can also modify pronouns or proper names; the sentence in (26) is one such example.

- (26) Zheng-zai      jingzuo      yundong      de      ZhouBotong      turan  
          Right-PROG      sit-in      demonstration      DE      ZhouBotong      suddenly  
          da      jiao      yi      sheng,      tiao-le      qi-lai.  
          big      scream      one      voice      jum-PERF      up-come  
          ‘ZhouBotong, who was sitting-in to stage a demonstration, suddenly screamed loudly and jumped up.’

Shi (2010) further indicates that the contrast shown in examples like (25) is due to the licensing of a proper denotation, that is, whether such a denotation can be construed for an RC and the noun it modifies. As the example in (26) shows, when the subject (*ZhouBotong*) is defined by a special property described by the RC (*zheng-zai jingzuo-yundong* ‘being sitting-in to stage a demonstration’), if the predicate of the sentence describes a possibly co-occurring temporary event, the sentence is acceptable. However, if the predicate of the sentence, instead, describes a certain event cognitively cannot be related to what is described by the RC of the subject, the sentence becomes unacceptable. As shown in (27), this sentence contains a subject modified by an individual-level RC, but this sentence is not acceptable, unlike (25a). The different acceptability between (25a) and (27) argues against Lin’s (2003) claim.

- (27) ??Xianglai      jiu      bu      ai      du      shu      de Xiaoming      turan  
          always      then      not      love      study      book      DE Xiaoming      suddenly  
          da      jiao      yi      sheng,      tiao-le      qi-lai.  
          big      scream      one      voice      jum-PERF      up-come  
          ‘Xiaoming, who does not love to study, suddenly screamed loudly and jumped up.’

In light of Shi’s (2010) proposal, I argue that these aforementioned facts can be accounted for under the current Focus analysis to RC1. What Shi (2010) suggests as being cognitively congruent between the main predicate and the RC naturally fits in the *Focus-Background* partition proposed by Rooth (1985, 1992) and Krifika (2007:18). According to them, *Focus* indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions, and *background* refers to where foci are interpreted. Thus, the acceptability of sentences does not depend on whether RCs involve a stage-level or individual-level predicate, but it depends on whether the RC of an argument and the main predicate of the sentence form a congruent *Focus-Background* relationship.

Given the current analysis, it follows that sentences like (28) can be interpreted as among attributes that can be used to describe *Obama* related to the particular *background* where it can be interpreted (*dangxuan Meiguo di-sishisi-ren zongtong* ‘being elected the 44<sup>th</sup> president of the USA’), such as Harvard Law graduate, the winner of 2009 Nobel Peace Prize, etc., the speaker selects and emphasizes “African American” as the Focus in the Focus-Background partition of the sentence.



- (28) [[<sub>RC</sub> Juyou hei.ren-xietong de] Obama] dangxuan Meiguo di-sishisiren zongtong.  
 possess black.people-blood DE Obama elected USA forty-fourth president  
 ‘Obama, who is an African American, was elected the 44<sup>th</sup> president of the USA.’

Notice that, according to Partee (2009:8), the alternative set of Focus may or may not be already in the context, and that the Focus itself can cause the hearer to search for a proper set to accommodate into the context. Following Partee (2009), I assume that the speaker of sentences like (28) does not have to have prior knowledge of all the possible alternatives upon uttering such a sentence, but that the choice that the speaker picks one specific attribute to form a RC to modify a proper name or a pronoun already serves to indicate the Focus status of RC of that nominal expression and causes the hearer to search for a proper set of alternatives to accommodate into the context.

## 6 Concluding Remarks

The syntax and the function of Chinese relative clauses have been a hot issue in linguistic studies, given that typologically modifiers of nominals, such as adjectives and relative clauses, rarely occur before a demonstrative (cf. Greenberg 1963, Chinque 2005), and yet such a sequence is common in Chinese. In this paper, I reviewed the debate over the functional differences of relative clauses at two different positions (e.g., restrictive vs. non-restrictive, specific vs. descriptive), investigated syntax and information structure of Chinese relative clauses, and presented results of a corpus study, and a production experiment. The theoretical analysis and empirical data follow naturally if the pre-demonstrative relative clause (RC1) is distinguished from the post-demonstrative relative clause (RC2) in that the former expresses Focus at the left-periphery of the nominal domain through nominal-internal Focus movement, similar to Focus at the left-periphery of a sentence *à la* Rizzi (1997). This analysis provides a sound explanation to why RC1 is more marked than RC2 is, consistently accounts for the same range of data discussed in the previous studies, and avoids discrepancies raised by previous proposals. The results of this paper support the nominal-clausal parallelism (Abney 1987; Chomsky 1970) and the edge (phase) property of DP (Citko 2014) with Chinese data, and it shows that features of information structure are active in narrow syntax (cf. Miyagawa 2010).

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