

## *Reanalysis of Gapless Relative Clause*

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**Abstract:** This paper compares the two most common analyses of gapless relative clause such as Zhangsan *tan gangqin de shengyin* (literally, ‘the sound of Zhangsan’s playing the piano’) in Mandarin Chinese. Such construction is analyzed to hold either a noun-complement relation [1, 2] or a predicate-subject relation [3] between the Head noun and its gapless relative clause. This paper rather rejects both analyses by collecting and analyzing more data of gapless relative clause, regular relative clause and appositive clause, suggesting such gapless relative construction to be independently existent from the other two constructions.

### 1. Introduction

#### 1.1. The Phenomena

Relative clause (RC) construction in Mandarin Chinese is typically head-final, consisting of the relative clause, the functional particle *de* and the Head noun.

In addition to the general relative clause construction, there also exists the so called “gapless relative clause construction” in Mandarin Chinese. The construction is given the name due to its major difference from regular RC construction: gapless RC construction does not have gap. However, it remains uncertain whether such construction belongs to RC construction or not [4].

- (1) 弹钢琴的张三 (RC)  
tan gangqin de Zhangsan  
play piano DE Zhangsan  
‘Zhangsan that played the piano’
- (2) 张三弹钢琴的声音 (gapless RC)  
Zhangsan tan gangqin de shengyin  
Zhangsan play piano DE sound  
‘the sound of Zhangsan’s playing the piano’

This paper, by collecting more data, intends to compare the two most common analyses – the noun-complement analysis and Zhang’s [3] reversed predication analysis – with the two constructions contrasted as follows:

- (3) 张三弹钢琴的声音 (gapless RC – noun-complement analysis)  
[COMPLEMENT Zhangsan tan gangqin de] [NOUN shengyin]

Zhangsan play piano DE sound  
 ‘the sound of Zhangsan’s playing the piano’  
 (4) 张三弹钢琴的声音 (gapless RC – reversed predication analysis)  
 [SUBJECT Zhangsan tan gangqin] de [PREDICATE shengyin]  
 Zhangsan play piano DE sound  
 ‘the sound of Zhangsan’s playing the piano’

In the usual noun-complement analysis, the Head noun takes the relative clause as its complement, whereas in the reversed predication analysis, the Head noun is the predicate and the relative clause is the subject.

This paper is structured as follows: Section 1.2 will briefly summarize the differences between regular RC construction and gapless RC construction, and Section 1.3 the differences between gapless RC construction and appositive clause construction. In Section 1.4 and Section 1.5, the noun-complement analysis and the reversed predication analysis will be introduced respectively. Section 2 discusses the basic methodology, regarding how the data were collected and processed. In Section 3, I will evaluate the noun-complement analysis and the reversed predication analysis respectively, and in Section 4, briefly discuss the semantic denotation of gapless RC construction.

## 1.2. Regular RC vs. Gapless RC

It is well researched that regular RC construction and gapless RC construction are different in following ways:

- a) The Head nouns of gapless RCs must be relational.
- b) The relative clauses of gapless RCs are grammatically not optional.
- c) Gapless RCs have no gaps.
- d) Gapless RCs must not be stacked, whereas regular RCs may.

First, as noted by Huang, A. Li and Y. Li [2], the Head nouns of gapless RC construction must be relational, whereas the ones of regular RC construction may not. The Head noun *ren* ‘person’ is not a relational noun, therefore yielding the ungrammaticality of (6):

- (5) 炒菜的那个人 (regular RC)  
 chao cai de na ge ren  
 fry vegetable DE that CL person  
 ‘the person who fried vegetables’  
 (6) \*妈妈炒菜的那个人 (gapless RC)  
 Mama chao cai de na ge ren  
 Mom fry vegetable DE that CL person  
 Intended: ‘the person who was with Mom when the latter fried vegetables’  
 Or: ‘the person for whom Mom fried vegetables’

The concept of “relational”, as suggested by de [3, 5, 6], refers to terms of kinship and other social relationships, terms of intrinsic characteristics, such as *speed* and *distance*, picture nouns, measure nouns, terms of part of a whole such as *handle*. However, such the concept fails to provide a falsifiable definition of “relational”, but merely defines it by some general semantic properties.

Second, Kim [1] and Zhang [3] suggest that the relative clauses of gapless RCs are grammatically not optional, whereas the ones of regular RCs are.

- (7) 他不喜欢(我买的)手机 (regular RC)  
 Ta bu xihuan (wo mai de) shouji

He not like ‘I buy DE’ cellphone  
 ‘He does not like the cellphone that I bought.’  
 (8) 他不喜欢(\*我炒菜的)味道 (gapless RC)  
 Ta bu xihuan (\*wo chao cai de) weidao  
 He not like ‘I fry vegetable DE’ smell  
 ‘He does not like the smell of my frying vegetables.’

The deletion of the relative clause in (8) – *wo chao cai de* ‘I fry vegetable DE’ – results in its ungrammaticality, whereas the deletion of the relative clause in (7) – *wo mai de* ‘I buy DE’ – does not. Such the difference is essentially correlated with the Head noun’s “relationalness”, as the relational properties must be established between the Head noun and some related characteristics that it requires. For instance, in (8), the gapless RC construction, the Head noun *weidao* ‘smell’ is bound to be correlated with its producer – how and why the smell is generated – and therefore rejects the relative clause’s deletion.

Third, Cha [7] and Kim [1] suggest that there exist no gaps in gapless RC construction. As shown by (9), the internal argument structure of *tan* ‘play’ has been fulfilled, therefore leaving no syntactic position for a gap.

(9) 张三弹钢琴的声音 (gapless RC)  
 [[SUBJECT Zhangsan] [VERB tan] [OBJECT gangqin]] de shengyin  
 Zhangsan play piano DE sound  
 ‘the sound of Zhangsan’s playing the piano’

Last, Jackendoff [8] and Kim [1] suggest that gapless RCs must not be stacked, whereas regular RCs may.

(10) 宝玉写的黛玉朗诵的诗 (regular RC)  
 Baoyu xie de Daiyu langsong de shi  
 Baoyu write DE Daiyu read.aloud DE poem  
 ‘the poem that Baoyu wrote and Daiyu read aloud’  
 (11) \*宝玉弹钢琴的黛玉唱歌的声音 (gapless RC)  
 Baoyu tan gangqin de Daiyu chang ge de shengyin  
 Baoyu play piano DE Daiyu sing song DE sound  
 ‘the sound of Baoyu’s playing the piano and Daiyu’s singing song’

In (10), the regular RC construction, the Head noun *shi* ‘poem’ could be simultaneously modified by two relative clauses: *Baoyu xie de* ‘Baoyu write DE’ and *Daiyu langsong de* ‘Daiyu read.aloud DE.’ However, (11), the gapless RC construction, rejects stacking. The reason resulting in such a difference is left unspecified.

### 1.3. Gapless RC vs. Appositive Clause

Appositive clause is generally analyzed to follow the noun-complement construction [1, 3]. The comparison between gapless RC and appositive clause also helps to testify whether the noun-complement analysis could be employed for gapless RC construction or not. The differences between gapless RC construction and appositive clause construction are listed as follows:

- e) Gapless RCs must not allow evaluative adverbs, whereas appositive clauses may.
- f) Gapless RCs must not allow an animate adnominal to occur to its left with an agent reading, whereas appositive clauses may.

First, as noted by Chang [9], gapless RCs must not allow evaluative adverbs, whereas appositive clauses may.

- (12) \*我闻到了[露露幸亏/居然煮饭的味道] (gapless RC)  
Wo wendao-le Lulu xingkui/juran zhufan de weidao.  
I smell-PRF Lulu fortunately/unexpectedly cook rice DE smell  
Intended: ‘I smelled the smell of Lulu’s {fortunately/unexpectedly} cooking.’
- (13) 我听说了[露露居然抢了银行]的报道 (appositive clause)  
Wo tingshuo-le Lulu juran qiang-le yinhang de baodao.  
I hear-PRF Lulu unexpectedly rob-PRF bank DE report  
‘I heard the report that Lulu unexpectedly robbed a bank.’

The evaluative adverbs *xingkui* ‘fortunately’ and *juran* ‘unexpectedly’ are rejected by (12), the gapless RC construction, whereas in (13), the appositive clause construction, there exists no syntactic constraint on evaluative adverbs.

Next, Zhang [3] suggests that gapless RCs must not allow an animate adnominal to occur to its left with an agent reading, whereas appositive clauses may.

- (14) \*露露的[宝玉弹钢琴的声音] (gapless RC)  
Lulu de Baoyu tan gangqin de shengyin  
Lulu DE Baoyu play piano DE sound  
Intended: ‘the sound of Baoyu’s playing the piano heard by Lulu’
- (15) 露露的[宝玉发表了论文的谣言] (appositive clause)  
Lulu de Baoyu fabiao-le lunwen de yaoyan  
Lulu DE Baoyu publish-PRF article DE rumor  
‘Lulu’s rumor that Baoyu published an article’

In (14), the animate adnominal *Lulu de* ‘Lulu DE’ is rejected by the following gapless RC construction, whereas in (15), the appositive clause construction allows the animate adnominal’s attachment. Though with such differences between gapless RCs and appositive clauses being proposed, there is no clear theoretical account for the differences between the two structures.

#### 1.4. Noun-complement Analysis

The noun-complement analysis, favored by Kim [1] and Huang, A. Li and Y. Li [2], suggests gapless RC construction to be parallel with appositive clause construction, in which the clause serves as the complement of its Head noun:

- (16) 张三弹钢琴的声音 (gapless RC)  
[COMPLEMENT Zhangsan tan gangqin de] [NOUN shengyin]  
Zhangsan play piano DE sound  
‘the sound of Zhangsan’s playing the piano’

## 2. Reversed Predication

Zhang’s [3] analysis centers on a reversed predication relation between the Head noun and the gapless relative clause, in which the Head noun is predicate whereas the clause is subject. Such the analysis, according to Zhang [3], accounts for a series of gapless RC construction’s differences from either regular RC construction or appositive clause construction.

In the reversed predication analysis, the Head noun is predicate whereas the gapless relative clause is subject. The relational property of gapless RC’s Head noun I) requires a licenser to saturate its

argument places, and the Head noun, therefore, is rather licensed by the relative clause, which also accounts for the adnominal clause's non-optionality in gapless RC construction II). Moreover, as the Head noun could be licensed merely once, gapless RC also rejects stacking as well IV).

As the gapless relative clause is regarded as subject in the reversed predication analysis, it follows that gapless RC construction has no gap III), and also allows no evaluative adverb V) in subject island [10].

As for why gapless RC construction allows no animate adnominal to occur to its left VI), the reversed predication analysis suggests that the relative clause in gapless RC construction serves as the Head noun's external argument and therefore leaves no more syntactic position for the attached animate adnominal.

Still, Zhang's analysis is advanced from merely the linguistic phenomena themselves, which summarizes the constructions' differences in a newly formed frame, but elucidates no syntactic structure to account for such differences.

### 3. Methodology

The data used in this paper were collected through three online surveys. The surveys were collected from different groups of people in altogether 25 days. The reason for dividing into three surveys was to remove potential misjudgments when the subjects were required to go through all the questions in a row. The surveys were designed on Tencent's platform – a convenient and highly efficient platform for surveys' collection and analysis. The following table shows the link, questions' number, subjects' number and content of the three surveys respectively.

Table 1: An Overview of the Surveys

Name	Survey 1	Survey 2	Survey 3
Link	<a href="https://wj.qq.com/s2/6667732/d582">https://wj.qq.com/s2/6667732/d582</a>	<a href="https://wj.qq.com/s2/6745700/a5f7">https://wj.qq.com/s2/6745700/a5f7</a>	<a href="https://wj.qq.com/s2/6858696/a522">https://wj.qq.com/s2/6858696/a522</a>
Questions' Number	87	52	31
Subjects' Number	48	36	39
Content	The insertion of evaluative mood, evidential mood and epistemic modal in gapless RCs and appositive clauses	The attachment of animate adnominal in gapless RCs and appositive clauses, stacking in regular RCs and gapless RCs	Movement in gapless RCs

During the collection, 48, 36 and 39 subjects respectively were required to make judgments – whether the sentences are grammatical, ungrammatical or uncertain – according to their linguistic competence, with them maintaining uninformed of the sentences' type. The result was generated automatically.

The subjects were instructed as follows:

Please judge whether the following sentences are grammatical, ungrammatical or uncertain according to your language sense.

## 12 我闻到了张三煮饭的味道 \*

- 可以
- 不可以
- 不确定

Figure 1: An Example Sentence in the Surveys

The following table shows the constitution of gender, age, education and dialect in one of the three surveys<sup>1</sup>. Specifically, as dialect does not affect the surveys' general result, it is therefore not taken to be a factor in the subjects' making of judgments.

Table 2: An Overview of the Subjects

Gender		Age		Education		Dialect	
Male	35.9%	11 – 20	25.6%	Undergraduate	87.2%	Wu	59.0%
Female	64.1%	21 – 30	71.8%	Graduate	12.8%	Northern	38.5%
		31 – 40	2.6%			Other	2.6%

## 4. Data & Analysis

Regarding the judgment in this paper, the sentences which more than 60 percent of subjects accepted were marked to be grammatical; the sentences which 40 percent to 60 percent of subjects accepted were marked to be uncertain – with '?'; the sentences which less than 40 percent of subjects accepted were marked to be unacceptable – with '\*'. With such standard for the judgment of every sentence, the data collected through the three aforementioned surveys, interestingly, rather fail to agree with either the noun-complement analysis or the reversed predication analysis.

### 4.1. Rejection of the Reversed Predication Analysis

To begin with, as for the comparison between gapless RCs and appositive clauses, the data yield rather different results from Zhang's [3], and therefore reject Zhang's reversed predication analysis.

Though Zhang [3] follows V) to claim that relative clauses in gapless RC construction are subjects and therefore allow no evaluative adverbs in such islands, the data collected by this paper rather suggest that both gapless relative clauses and appositive clauses do not allow evaluative adverbs.

- (17) \*我闻到了张三幸亏煮饭的味道 (gapless RC)  
Wo wendao-le Zhangsan xingkuai zhu fan de weidao  
I smell-PRF Zhangsan fortunately cook rice DE smell  
'I smelled the smell of Zhangsan's fortunately cooking.'
- (18) \*这就是张三幸亏救人的回报 (gapless RC)  
Zhe jiu shi Zhangsan xingkuai jiu ren de huibao

<sup>1</sup> As the three surveys were conducted in different groups of subjects, which, however, may have some overlap, the general information listed in this paper was taken from one of the groups – the group of subjects that took the third survey.

This just is Zhangsan fortunately save person DE reward  
 ‘This is just the reward of Zhangsan’s fortunately saving the person.’

(19) \*报纸上刊登了球队幸亏赢球的消息 (appositive clause)

Baozhi shang kandeng-le qiudui xingkui yingqiu de xiaoxi  
 Newspaper on publish-PRF football-team fortunately win DE information

‘The information that the football team’s fortunately winning the game was published in the newspapers.’

(20) \*张三告诉了李四球队教练幸亏辞职的新闻 (appositive clause)

Zhangsan gaosu-le Lisi qiudui jiaolian xingkui cizhi de xinwen  
 Zhangsan tell-PRF Lisi football-team coach fortunately resign DE news

‘Zhangsan told Lisi the news that the fooball team’s coach’s fortunately resigning.’

The following table shows the number and also percentage of subjects that regarded the sentences (17), (18), (19) and (20) grammatical. It is suggested that regarding the grammaticality of evaluative adverbs’ insertion, there exists no significant contrast between gapless relative clauses and appositive clauses, with both types marked as unacceptable.

Table 3: The Grammaticality of (17)-(20)

Sentence	(17)	(18)	(19)	(20)
Sentence Type	Gapless RC	Gapless RC	Appositive Clause	Appositive Clause
Number (Grammatical)	7/39	5/39	4/39	7/39
Percentage (Grammatical)	17.9%	12.8%	10.3%	17.9%

Also notably, regular relative clauses do not accommodate evaluative adverbs either.

(21) \*报纸上发表了李四幸亏写的诗 (regular RC)

Baozhi shang fabiao-le Lisi xingkui xie de shi  
 Newspaper on publish-PRF Lisi fortunately write DE poem

‘The poem that Lisi fortunately wrote was published in the newspapers.’

(22) \*书架上摆着张三幸亏读的书 (regular RC)

Shujia shang bai-zhe Zhangsan xingkui du de shu  
 Bookshelf on lay-PRF Zhangsan fortunately read DE book

‘The book that Zhangsan fortunately read was laid on the bookshelf.’

Therefore, whether clauses allow evaluative adverbs does not depend on the clauses’ type, but is rather attributed to the adverbs themselves. Evaluative adverbs refer to the type of adverbs with which the speaker comments on some event, and are generally regarded to be included in the speaker-oriented adverbs [11, 12]. The uninterpretable feature carried by the speaker-oriented adverb, however, must be checked by the abstract feature located in the main clause. It is therefore followed that such speaker-oriented adverbs – with evaluative adverbs included – must reside in the main clauses rather than the regular relative clauses, the gapless relative clauses and also the appositive clauses.

Next, established on VI), Zhang’s reversed predication analysis rather claims that the relative clause in gapless RC construction serves as the Head noun’s external argument and leaves no more syntactic position for an animate adnominal, whereas in appositive clause construction, the Head

noun takes its complement as the internal argument and the syntactic position for external argument is still available. The data, however, rather oppose VI) by suggesting that both gapless relative clauses and appositive clauses do not allow an animate adnominal be in the external argument position.

(23) \*这就是李四的张三煮饭的味道 (gapless RC)

Zhe jiu shi Lisi de Zhangsan zhu fan de weidao

This just is Lisi DE Zhangsan cook rice DE smell

Intended: ‘This is just the smell of Zhangsan’s cooking that Lisi smelled.’

(24) \*这就是李四的张三救人的回报 (gapless RC)

Zhe jiu shi Lisi de Zhangsan jiu ren de huibao

This just is Lisi DE Zhangsan save person DE reward

Intended: ‘This is just the reward of Zhangsan’s saving the person that Lisi gave.’

(25) \*他听说了李四的张三赢球的消息 (appositive clause)

Ta tingshuo-le Lisi de Zhangsan yingqiu de xiaoxi

He hear-PRF Lisi DE Zhangsan win DE information

Intended: ‘This is just the information of Zhangsan’s winning the game that Lisi told.’

(26) \*他听说了李四的张三辞职的新闻 (appositive clause)

Ta tingshuo-le Lisi de Zhangsan cizhi de xinwen

He hear-PRF Lisi DE Zhangsan resign DE news

Intended: ‘This is just the news of Zhangsan’s resigning that Lisi told.’

The grammaticality of (23), (24), (25) and (26) is listed in the following table. Though the grammaticality of (25) and (26) is to some extent higher than that of (23) and (24), both gapless RCs and appositive clauses are marked to be ungrammatical with the attachment of animate adnominal. The reversed predication analysis, however, is therefore disproved.

Table 4: The Grammaticality of (23)-(26)

Sentence	(23)	(24)	(25)	(26)
Sentence Type	Gapless RC	Gapless RC	Appositive Clause	Appositive Clause
Number (Grammatical)	7/36	7/36	14/36	9/36
Percentage (Grammatical)	19.4%	19.4%	38.9%	25%

#### 4.2. Rejection of the Noun-complement Analysis

The data also reject the claim that the Head noun takes the gapless relative clause as its complement in the noun-complement analysis.

(27) \*那架钢琴，我听到了张三弹的声音 (gapless RC)

Na jia gangqin wo tingdao-le Zhangsan tan de shengyin

That CL piano I hear-PRF Zhangsan play DE sound

‘That piano, I heard the sound of Zhangsan’s playing.’

(28) \*那本书，张三买的预算不够 (gapless RC)

Na ben shu Zhangsan mai de yusuan bu gou

That CL book Zhangsan buy DE budget not enough

‘That book, the budget of Zhangsan’s buying is not enough.’

(29) 那件事情，张三处理的效率令我失望 (gapless RC)

Na jian shiqing Zhangsan chuli de xiaolv ling wo shiwang

That CL issue Zhangsan deal.with DE efficiency make me disappointed

‘That issue, the efficiency of Zhangsan’s dealing with made me disappointed.’

The following table manifests the grammaticality of (27), (28) and (29) respectively. In (27) and (28), *na jia gangqin* ‘that piano’ is to be moved from the embedded gapless relative clause *Zhangsan tan [na jia gangqin] de shengyin* ‘the sound of Zhangsan’s playing that piano’, and *na ben shu* ‘that book’ is to be moved from the embedded gapless relative clause *Zhangsan mai [na ben shu] de yusuan* ‘the budget of Zhangsan’s buying of that book’. Such movement, however, is regarded to be ungrammatical, which manifests the gapless RC constructions to be complex NP islands [13]. The noun-complement analysis in which the gapless RC is regarded to be the complement of the Head noun, however, is therefore disproved.

Table 5: The Grammaticality of (27)-(29)

Sentence	(27)	(28)	(29)
Sentence Type	Gapless RC	Gapless RC	Gapless RC
Number (Grammatical)	11/39	11/39	29/39
Percentage (Grammatical)	28.2%	28.2%	74.4%

Still, though (29) also belongs to the gapless RC construction with (27) and (28), interestingly, the majority of subjects rather consider it to be grammatical. One possible explanation is that the sentences resembling (29) are more frequently used in everyday communications, and the subjects’ judgment is also affected by their familiarity with such kind of sentences.

(30) 提高业务处理效率

tigao [NP [COMPLEMENT yewu] [NOUN chuli xiaolv]]

improve business deal.with efficiency

‘improve the efficiency of dealing with business’

(31) 提高道路交通事故的处理效率

tigao [NP [COMPLEMENT daolu jiaotong shigu de] [NOUN chuli xiaolv]]

improve road traffic accident DE deal.with efficiency

‘improve the efficiency of dealing with road traffic accidents’

The sentences (30) and (31) are collected from the BLCU Corpus Center (BCC)<sup>2</sup> – a rather authoritative corpus established and managed by Beijing Language and Culture University. In such sentences, the verb *chuli* ‘deal with’ and the noun *xiaolv* ‘efficiency’ form altogether as a compound noun, with its previous noun *yewu* ‘business’ and *daolu jiaotong shigu* ‘road traffic accident’ serving as its complement. Therefore, though resembling the gapless RC construction in (29), the sentences (30) and (31) are grammatical as they do not involve the complement’s movement from the embedded gapless relative clause, and their grammaticality, nevertheless, results in the subjects’ misjudgment of (29).

<sup>2</sup> <http://bcc.blcu.edu.cn>

## 5. Discussion

In terms of gapless RC construction, a semantic observation is that there exists a cause-effect relation between the gapless relative clause and its Head noun: the content of the clause constitutes *cause* and that of the Head noun *effect* [14].

(32) 张三弹钢琴的声音 (Gapless RC)  
Zhangsan tan gangqin de shengyin  
Zhangsan play piano DE sound  
'the sound of Zhangsan's playing the piano'

(33) 张三煮饭的味道 (Gapless RC)  
Zhangsan zhu fan de weidao  
Zhangsan cook rice DE smell  
'the smell of Zhangsan's cooking'

In the sentences (32) and (33), the Head nouns *shengyin* 'sound' and *weidao* 'smell' are rather semantically caused by the actions in their previous gapless relative clauses, with such sentences therefore being interpreted as 'the sound caused by Zhangsan's playing the piano' and 'the smell caused by Zhangsan's cooking'.

The appositive clause, however, does not hold the semantic cause-effect relation.

(34) 张三抢银行的报道 (appositive clause)  
Zhangsan qiang yinhang de baodao  
Zhangsan rob bank DE report  
'the report that Zhangsan robbed a bank'

(35) 张三赢球的消息 (appositive clause)  
Zhangsan yingqiu de xiaoxi  
Zhangsan win DE information  
'the information of Zhangsan's winning the game'

In the sentences (34) and (35), the Head nouns *baodao* 'report' and *xiaoxi* 'information' do not come into existence only for *Zhangsan qiang yinhang* 'Zhangsan robbed a bank' and *Zhangsan ying qiu* 'Zhangsan won the game', which follows that there exists no cause-effect relation between the appositive clause and its Head noun.

Similarly, in regular RC construction, there exists merely the modifier-modified relation between its relative clause and its Head noun, but still with no cause-effect relation.

(36) 张三写的诗  
Zhangsan xie de shi  
Zhangsan write DE poem  
'the poem that Zhangsan wrote'

(37) 张三读的书  
Zhangsan du de shu  
Zhangsan read DE book  
'the book that Zhangsan read'

In the sentences (36) and (37), the Head nouns *shi* 'poem' and *shu* 'book' are specifically limited to be "the poem written by Zhangsan" and "the book read by Zhangsan" in their regular RC construction. Though (36) might suggest a cause-effect reading between the poem and Zhangsan's writing, the absolute fact that the book must be written and published before the action of Zhangsan's

reading in (37), nevertheless, indicates such semantic relation is not structurally correlated with regular RC construction. Therefore it is plausible to treat (36) as mere the exception, with such accidental cause-effect relation provided by merely the verb *xie* ‘wrote’ rather than by the general construction.

## 6. Conclusion

In this paper, I have compared the two most common analyses of gapless RC construction: one is the noun-complement analysis, in which the Head noun takes the gapless relative clause as its complement; the other is the reversed predication analysis proposed by Zhang [3], in which she claims the Head noun to be the predicate and the gapless relative clause the subject. More collected data of gapless RC, regular RC and appositive clause suggest that gapless RC construction is not to be analyzed in either way. Gapless RC construction does not conform with the reversed predication analysis, as it behaves just the same with appositive clause construction regarding both the insertion of evaluative adverbs and also the attachment of animate adnominal. Gapless RC construction is not in accord with the noun-complement analysis, as the complement of VP in the relative clause is not allowed to move out. Also some observation from semantics suggests gapless RC construction to be independently existent from either regular RC construction or appositive clause construction in that there exists a unique cause-effect relation between the Head noun and its gapless RC clause.

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