

ABSTRACT

Whether or not Chinese has nonrestrictive relative clauses has been very controversial. This paper reviews existing arguments for and against treating pre-determiner or post-determiner relatives as nonrestrictive relatives in the literature. I show that arguments for analyzing pre-determine or post-determiner relatives as nonrestrictive relatives are not convincing. All relative clauses that occur with a determiner should be analyzed as restrictive. However, it is too strong a claim to say that nonrestrictive relative clauses do not exist in Chinese. When the antecedent of a relative clause is a proper name, the nonrestrictive interpretation is allowed if the relative clause describes a more or less permanent or stable property.

Key Words: Relative Clauses, Restrictive, Nonrestrictive

1. Introduction

It is well known that English restrictive relative clauses differ from nonrestrictive relative clauses in phonology, orthography, semantics and syntax (Jackendoff 1977, Bache and Jakobsen 1980, Huddleston 1984, McCawley 1988, among others). For example, consider the contrast between (1a) and (1b), taken from Lyons (1977: 760).

- (1) a. The soldiers who were brave ran forward.  
b. The soldiers, who were brave, ran forward.

The restrictive relative clause in (1a) syntactically forms an integrated part with the antecedent that it modifies and is phonologically in the same intonation contour as the latter, whereas the nonrestrictive relative clause in (1b) is separated from its antecedent NP by two commas and is marked off prosodically from the remainder of the sentence. Semantically, (1a) differs from (1b) insofar as the former implies existence of other soldiers besides those who were brave, whereas the latter does not

have such an implication. Instead, (1b) implies that all the soldiers in the context were included and they were all brave. Restrictive relatives also differ from nonrestrictive relative clauses in many other ways, including the possibility of using *that* to introduce the relative clause, the capability of stacking and the ability to be extraposed to the end of the sentence, etc.

Although the syntactic distinction between restrictive and nonrestrictive relative clauses in English seems to be pretty clear—at least in so far as the presence/absence of a comma and the possibility or impossibility to use *that*, this does not seem to be the case for Chinese relative clauses, which appear before the head noun.<sup>1</sup>

Prenominal relative clauses in Chinese can either precede or follow a

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<sup>1</sup> According to Tang (1979/1981), Chinese also has postnominal relative clauses, as is shown by (i).

- (i) Zhe yi ben zidian, wo zuotian mai de, feichang shiyong  
 this one CL dictionary I yesterday buy DE, very useful  
 ‘This dictionary, which I bought yesterday, is very useful.’

However, whether or not the above type of sentence involves relativization is debatable. For one thing, it is not clear that the *de* in (i) is the same *de* as appears in a prenominal relative clause. In fact, it looks more like the *de* that expresses past tense as in (iia) below. Notice that while the *de* in (i) is not compatible with a future time adverbial as shown by (iia), the *de* in standard prenominal relative clause is fully compatible with future tense interpretation as (iib) indicates. This indicates that the *de* in (i) is more like the past tense *de* in (ii) rather than a relativization marker.

- (ii) a. Wo zuotian wanshang huilai de  
 I yesterday night return DE  
 ‘I came back last night.’

- b. \*Wo mingtian wanshang huilai de  
 I tomorrow night return De  
 ‘I will come back tomorrow night.’

- (iii) a. \*Na ben zidian, wo mingtian (yao) mai de, feichang shiyong  
 this CL dictionary I tomorrow want buy De, very useful  
 ‘This dictionary, which I will buy tomorrow, is very useful.’

- b. Wo mingtian yao mai de na-ben zidian  
 I tomorrow want buy Rel that-CL dictionary  
 ‘The dictionary that I want to buy tomorrow’

Tsao (1986) also has argued against treating examples like (i) as examples of nonrestrictive relative clauses because he thinks that such examples are usually found only in translation or Westernized writing.

determiner-(numeral)-classifier (DNC) sequence. This is illustrated by the examples in (2).<sup>2</sup>

- (2) a. Dai    yanjing    de    na-ge    xuesheng  
      wear    glass        De    that-Cl    student  
      ‘the student who is wearing glasses’
- b. Na    ge    dai    yanjing    de    xuesheng  
          that    Cl    wear    glass        De    student  
          ‘the student who is wearing glasses’

In this paper, I will refer to those relative clauses with the order of (2a) as pre-DNC relatives and those with the order in (2b) as post-DNC relatives. On the basis of the two relative orders between DNC and the relative clause, Chao (1968: 286), followed by Hashimoto (1971: 24-25), claims that a relative clause is descriptive when the demonstrative precedes the relative clause as in (2b), whereas it is restrictive when the order is reversed as in (2a). Chao’s claim would constitute a very nice syntactic test to distinguish restrictive relatives from nonrestrictive relatives, if the claimed correspondence between syntactic structures and semantic interpretations can be proven to be true. Unfortunately, his claim is later refuted by Tang (1981) and Teng (1981), a position also shared by Tsao (1986). Tang argues that native speakers do not see the positional difference between restrictiveness and nonrestrictiveness in the manner suggested by Chao. He instead proposes that the relative position between DNC and the relative clause is decided by the grammatical function (as subject or object) of the head NP in the relative clause-to-be sentence as well as its grammatical function in the matrix sentence. As for Teng (1981: 14), he suggests that the position of the relative clause might be controlled by phonology and thinks that Chinese

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<sup>2</sup> The *de* that appears in Chinese relative clause seems to be the same *de* for other types of modifying constituents.

- (i) a. Wo    de    shu  
      I    De    book  
      ‘My book’
- b. congming    de    xiaohai  
          smart        De    child

relative clauses might be better analyzed in terms of contrastiveness rather than restrictiveness. On the other hand, Huang (1982: 68) claims that however subtle the distinction between examples like (2a) and (2b) is, it does exist. Contra Huang (1982), Tsai (1994) argues for an opposite claim. He thinks that pre-DNC relatives are nonrestrictive relatives, whereas post-DNC relatives are restrictive relatives. More recently, Lin (1997) has argued that all prenominal relatives are restrictive, irrespective of their position relative to the demonstrative, unless what is modified is a proper name. This line of thought has been further pursued by Del Gobbo (2001) and Zhang (2001). However, the latter two authors deny the existence of any nonrestrictive relatives in Chinese. Given these diversified views about the restrictive vs. nonrestrictive distinction in Mandarin Chinese, it seems necessary to carefully examine existing arguments for or against a particular version of Chinese restrictive and nonrestrictive relatives produced by different linguists. Indeed, the main purpose of this paper is to make a contribution to this controversy by carefully reviewing the force of arguments for each position.

This paper is organized as follows. Section 2 is a review of the arguments for the treatment of post-DNC relatives as nonrestrictive relatives and section 3 a review of arguments against it. Section 4 produces an argument against treating post-DNC relatives as nonrestrictive relatives from the viewpoint of semantic composition. Section 5 discusses whether or not pre-DNC relatives can be analyzed as nonrestrictive relatives. Section 6 offers a semantic composition for nonrestrictive relatives modifying a proper name. Finally, section 7 is the concluding section of this paper.

## 2. Reviewing arguments for post-DNC relatives as nonrestrictive relatives

Despite Chao's (1968) claim that the restrictive vs. nonrestrictive/descriptive distinction of Chinese relative clauses is determined by the position of the relative clause, so far as I know, there are very few formal linguistic arguments for such a claim. The only formal argument in support of Chao's claim that I know of is provided by Huang (1982). In this section, I will review his argument, showing that it is not convincing.

## 2.1 Review of Chao (1968)

Let me begin with Chao's (1968) own description of the restrictive vs. nonrestrictive/descriptive relative clauses in his book. He characterizes the distinction as follows:

“Although *de* marks explicit modification, it has less logical force when used descriptively than when used restrictively. For example, in: 可憐的孩子！餓了也沒得吃！*Keelian de hairtz! Ehle yee mei de chy!* ‘Poor child! He’s hungry and has nothing to eat!’ *keelian* only describes *hairtz* rather than distinguishing it from other *hairtz*. If there is a demonstrative D-M modifier and another modifier, the order determines whether it is restrictive or descriptive. For example: (a) 那位戴眼鏡的先生是誰？*Ney-vey day yeanjienql de shian.sheng sh sheir?* ‘Who is that gentleman (who incidentally is) wearing glasses?’: (b) *Day yean-jienql de ney-vey shian.sheng sh sheir* ‘Who is the gentleman who is wearing glasses (not the one who is not wearing glasses)?’ But if a contrasting stress is placed on a modifier, it is used restrictively, so that if *day yeanjienql* in (a) is contrastively stressed, the sentence will have the same restrictive sense as in (b).”

Chao 1968: 286)

Two points about Chao's above remark are worth noting. First, he actually does not use the term “nonrestrictive” but the term “descriptive” to refer to post-DNC relatives. It is not clear that Chao's use of the term “descriptive” is completely equivalent to what is understood as “nonrestrictive” but from the discussion of the literature, these two terms seems to have been to be equivalent. Second, Chao himself remarks that a post-DNC relative can have a restrictive reading when it has a contrasting stress. This means that a post-DNC relative is not always nonrestrictive even on Chao's analysis, a point which is sometimes overlooked.

I agree with Chao that a post-DNC can have a restrictive interpretation but I do not think that a contrasting stress is necessary. That a non-contrastive post-DNC relative can be restrictive is supported by many linguistic phenomena. One piece of evidence has to do with the fact that a post-DNC relative can modify a “nonassertive

head”, as shown below.

- (3) Ta bu chi renhe yi zhong meiyou zhu-guo de shiwu  
he not eat any one kind not cook-Asp Rel food  
‘He does not eat any kind of food that is not already cooked.’

Quirk, et al (1991: 1241) has pointed out that when a head noun modified by a relative clause is nonassertive, the relative clause can only be restrictive. In contrast, assertive heads allow restrictive modification.

- (4) a. I won’t see any person/anyone, who has not made an appointment.  
b. Someone, who sounded like your mother, called to say she wanted to see you.  
(Quirk, et al 1991: 1241)

Indeed, native speakers understand the relative clause in (3) to restrict the reference of the head noun to a subset of it. Thus, semantically, the relative clause in (3) must be a restrictive relative. However, the relative in question does not need a contrasting stress to obtain the restrictive function.

Similarly, Smith (1964), Ross (1967), Rodman (1976) have observed that determiners like *every*, *any*, *no*, *each*, etc., normally prevent the occurrence of nonrestrictive relatives, as is illustrated by (5).

- (5) \*Any/\*No/\*Every student, who is wearing socks, is a swinger.  
(Ross 1967: 135)

However, as Lin points out (1997), Chinese Post-DNC relatives may perfectly occur with determiners such as *mei* ‘every’, *renhe* ‘any’, or *dabufen* ‘most’, and semantically restrict the reference of the head noun to a subset of it. This is illustrated by the examples in (6).

- (6) a. Mei yi ge canjia daxue-liankao de gaozhongsheng  
every one Cl attend joint-entrance-exam De high-school-student  
dou renwei shiti tai nan

all think questions too difficult

‘Every high school student who took the joint entrance exam thinks that the questions are too difficult.’

b. Dabufen qu shang Tang jiaoshou ke de xuesheng dou shi  
most go attend Tang professor class De student all be  
xiang zuo jufaxue de ren  
want do syntax De person

‘Most people who attend Professor Tang’s classes are those who want to do syntax.’

The examples in (6) thus constitute a further piece of evidence that post-DNC relatives can be restrictive without a particular contrasting stress.

Also, it has been pointed out that restrictive relatives can be stacked but nonrestrictive relatives cannot (McCawley 1988). Thus, if post-DNC relatives can be stacked, this proves that they can be restrictive. Such data do exist, as Lin (1997) has observed.<sup>3</sup>

(7) Na wei [wo renshi de] [jiao yuyanxue de] zhungguo laoshi  
that Cl I know Rel teach linguistics Rel Chinese teacher  
‘the Chinese teacher that I know who teaches linguists’

The restrictive nature of the relative clause in (7) is supported by the fact that (7) can be used in a situation where there is more than one Chinese teacher of linguistics and more than one Chinese teacher that I know. In such a context, the two relative clauses are used to help identify the referents and hence should be restrictive.

But can a post-DNC relative be used to provide an additional piece of information for an independently identified referent just like English nonrestrictive relatives? It seems to me that establishment of this conclusion is not as straightforward as it might appear. Chao (1968) does not illustrate in which context the Chinese sentence *Ney-wei day yeanjienql de shian.sheng sh sheir?* ‘Who is that

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<sup>3</sup> This argument relies crucially on the assumption that nonrestrictive relatives cannot be stacked. However, Vries (2000) finds that nonrestrictive relatives can be stacked in

gentleman (who incidentally is) wearing glasses?’ is uttered when the relative clause is understood as “descriptive”. But given his characterization of restrictive vs. descriptive/ nonrestrictive, the most likely context that I can think of is one in which the denotation of the common noun modified by the relative clause has a unique referent. A possible scenario is this. Imagine that there is one and only one man at a distance and he is wearing glasses. John doesn’t know who that man is. So he asks Bill who is standing beside him who that man is. In this scenario, there is a unique referent denoted by *shian.shen* ‘Mr.’ that both the speaker and the hearer can identify. Since there is no contrast between this unique man with other men, the function of the relative clause is not to limit the possible reference of *shian.shen* ‘Mr.’ A post-DNC relative in this context then should be “descriptive” in Chao’s sense, because it only describes a property of this referent rather than restricting the reference of the common noun.

Now the question is: Must a non-contrasting post-DNC relative in a unique referent context, as illustrated above, be interpreted in a nonrestrictive way? To answer this question, let us first consider the case of English. It is well-known that in English a nonrestrictive relative can only be introduced by a wh-pronoun but not by the complementizer *that*. Thus, in contrast to (8a), (8b) is ill-formed.

- (8) a. I know John, who works at IBM.  
b. \*I know John, that works at IBM.

Therefore, we can take the use of *that* in a relative clause as evidence for the restrictive usage.

Now consider the following English sentence.

- (9) Who is the man standing over there that is wearing glasses?

In (9), the relative clause is introduced by *that*. Therefore, the relative clause must be restrictive in the traditional sense. Very interestingly, however, the sentence can be used in precisely the context that was given above—a context in which the man

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Dutch, but at the same time he says that such examples are rare.

standing over there is not contrastive to other men.

The following sentence is similar. Imagine that a teacher enters a classroom and finds one and only one book on his table. That book happens to have no name on it. So the teacher asks the students the question:

(10) Whose book is this that has no name on it?

Again, in this context there is a unique referent independently determined by the context—i.e., the book on the table. Hence the book in question is not contrastive to other books. However, the relative clause is not a nonrestrictive relative, as a nonrestrictive relative cannot be introduced by *that*; nor can a nonrestrictive relative be extraposed to the end of the sentence.

Sentences (9) and (10) thus indicate that non-contrastiveness is not a guarantee of nonrestrictiveness, as one might falsely assume. In this connection, it is interesting to point out that Haussamen (1995) has observed that not all relative clauses in English are either defining and essential or parenthetical, as a grammar book usually says. According to him, many relative clauses contain information that does not restrict or define the antecedent but are important, essential, sometimes even primary information in the sentence. He calls such relatives “amplifying clauses”. Two examples of his are the following:

(11) The committee continued several hours of open hearings today, followed by a closed session in which the panel’s members discussed a variety of classified intelligence matters.

(12) They had their own little bottle of Ice-nine which kept them estranged from the rest of the world.

With respect to the above two sentences, Haussamen (1995) remarks,

“even when the antecedent appears to be indefinite, as in *a closed session*, the following clause does not restrict or define as much as it comments and describes. Even when the antecedent is fully specified, as in the *bottle of Ice-nine*, the following clause is essential to the sentence and not parenthetical... These

amplifying clauses are generally not separated by commas; this makes sense because although they are not restricting the antecedent, they are still closely linked to it.”

The above remark indicates that relative clauses occurring with a fully specified antecedent that is identified intrinsically or in context need not be nonrestrictive or parenthetical. Perhaps, the non-contrastive sentences against a unique referent context that I discussed above, i.e., Chao’s descriptive clauses, are just another kind of clause that does not restrict the reference nor is parenthetical, but is closely linked to the head noun.

In summary, Chao’s remark cited above does not really provide evidence for the claim that a post-DNC can be nonrestrictive. What he refers to as descriptive clauses might be a type of clause that takes the form of a restrictive clause but whose function is not to restrict the reference just like Haussamen’s amplifying clauses. Thus, to establish that post-DNC relatives can be nonrestrictive in the same sense as English nonrestrictive relatives, formal linguistic evidence must be sought for. It is not enough to say that non-contrastive relatives are descriptive.

## 2.2 Review of Huang (1982)

One piece of linguistic evidence in support of Chao’s distinction between restrictive and descriptive/nonrestrictive is provided in Huang (1982). He argues that though the distinction between restrictive and nonrestrictive interpretations is sometimes hard to detect, the distinction may show up as one in grammaticality under certain circumstance. He points out that when a relative clause appears within a noun phrase used as an nonrestrictive NP to a proper name, the relative clause must follow the demonstrative, as the contrast between (13a) and (13b) shows.

- (13) a. Niuyue, zhege renren dou zhidao de chengshi  
New York this everone all know Rel city  
‘New York, the city which everyone knows’  
b. \*Niuyue, renren dou zhidao de zhege chengshi  
New York everyone all know Rel this city

‘New York, the city which everyone knows’

According to Huang, when a demonstrative occurs before a relative clause, the latter modifies the head noun but not the demonstrative. Since the referential function of the demonstrative is not under the effect of any modifier, the demonstrative is used deictically. Therefore, the relative clause following it does not help determine the NP’s reference and the relative clause should be nonrestrictive. On the other hand, when a demonstrative is within the scope of a relative, Huang (1982: 69-70) says, “it is, in this case, an ‘anaphoric’ demonstrative, as its referential value is subject to the modification of the c-commanding relative clause”. Moreover, the gap within the relative is a variable bound to the N-bar (QP+N). Therefore, the relative clause is “essential to the value of the ‘quantificational’ N-bar binding the variable, and is restrictive” (1982: 70). It thus follows from this account that (13a) is grammatical, whereas (13b) is ungrammatical.

There are reasons to believe that Huang’s above argument is not convincing. One factor that eludes Huang’s attention is the distinction between *zhe* ‘this’ and *na* ‘that’. The choice between these two demonstratives in nonrestrictive NPs often leads to a different grammatical judgment. For example, though the examples in (14) below involve the same construction as Huang’s examples in (13), every native speaker that I consulted accept both (14a) and (14b).

(14) a. Laura Walsh, na wei wo zai meiguo renshi de pengyou,  
Laura Walsh that Cl I in U.S know Rel friend  
zuotien huran da-le yi tong dianhua gei wo  
yesterday suddenly dial-Asp one Cl call to me  
‘Laura Walsh, the friend that I came to know in the U.S., suddenly called me yesterday.’

b. Laura Walsh, wo zai meiguo renshi de na wei pengyou,  
Laura Walsh I in U.S know Rel that Cl friend  
zuotien huran da-le yi tong dianhua gei wo  
yesterday suddenly dial-Asp one Cl call to me  
‘Laura Walsh, the friend that I came to know in the U.S., suddenly called me yesterday.’

Similarly, in the following examples provided to me by an anonymous reviewer, the choice between *zhe* ‘this’ and *na* ‘that’ makes a great difference<sup>4</sup>:

- (15) a. Kandaha, (ye-jiiu-shi) shenxueshi zhanling de na-/\*zhe-ge  
 Kandahar, (that-is) Taliban occupy Rel that-/ \*this-Cl  
 chengshi  
 city  
 ‘Kandahar, the city that the Taliban occupies’
- b. Kandaha, (ye-jiiu-shi) na-/\*zhe-ge Shenxueshi zhanling de  
 Kandahar, (that-is) that-/ \*this-Cl Taliban occupy Rel  
 chengshi  
 city  
 ‘Kandahar, the city that the Taliban occupies’

The examples in (15) are of great significance, as they constitute a minimal pair, which shows that what is crucial to the distribution of demonstratives in nonrestrictive NPs with a relative clause is the choice between *zhe* ‘this’ and *na* ‘that’ rather than the relative order between the demonstrative and the relative clause.

But why is there a contrast between the use of *zhe* and *na* in nonrestrictive NPs with a relative clause? Although I do not exactly know the reason, I speculate that this might have to do with proximity of these two demonstrative pronouns. As is well known, when an object referred to is near the speaker, *zhe* ‘this’ is used, but when an object referred to is at some distance from the speaker, *na* ‘that’ is used. This then suggests that (13a) is better than (13b) because in the former example, the NP-initial *zhe* is closer to, in fact adjacent to, the head NP *niuyue* ‘New York’ than the *zhe* in (13a), which appears in a middle position of the DP. On the other hand, *na* ‘that’ does not display the same positional effect as *zhe* ‘this’, because it has been gradually grammaticalized to something more like English definite article *the* and thus has lost

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<sup>4</sup> When *ye-jiiu-shi* ‘that is’ is removed, (15b) is acceptable.

its proximity property.<sup>5</sup>

Although the proximity account for the use of *zhe* in nonrestrictive NPs with a relative needs to be further examined, the examples discussed clearly show that the only evidence provided by Huang for treating post-DNC relatives as nonrestrictive relatives is not convincing. To the contrary, we can find many arguments for treating post-DNC relatives within nonrestrictive NPs as restrictive relatives. Canac Marquis and Tremblay (1996), on the basis of English and French, have shown that relative clauses embedded to a nonrestrictive NP are always restrictive. Thus, examples like (16b) are ungrammatical.

(16) a. New York, the/a city which everyone knows,...

b. \*New York, the/a city, which everyone knows,...

Now given that Huang's example in (13a) involves exactly a relative clause embedded to a nonrestrictive NP, that relative clause must be restrictive rather than nonrestrictive on the assumption that Canac Marquis and Tremblay's (1996) finding is universally true.

Still, another piece of evidence against Huang's argument has to do with the ordinal determiner *di* 'ordinal (number)'. In English, when a relative clause modifies an NP with an ordinal determiner, it can only be restrictive. This is illustrated by the following examples.

(17) a. New York is the first city that I have visited in America.

b. \*New York is the first city, which I have visited, in America.

(18) a. The first book that I wrote is Antisymmetry in Syntax.

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<sup>5</sup> A reviewer has pointed out to me that *zhe* also differs from *na* with respect to anaphoric usage, as the contrast below indicates:

(i) Mei-ge ren dou deng-zhe dui ta jiao de na-/\*zhe-zhi gou  
every-Cl person all stare-Asp to him bark Rel that/this-CL dog  
'Everyone is staring at the dog that barks at him.'

It is not clear whether or not the anaphoric usage of demonstratives is related to the contrast between the usage of *zhe* and *na* in nonrestrictive NPs with a relative clause.

b. \*The first book, which I wrote, is Antisymmetry in Syntax.

The requirement that the ordinal determiner is only compatible with a restrictive relative indicates that the post-DNC relative in (19) is restrictive rather than nonrestrictive. Indeed, the semantic function of relatives in such constructions is to restrict the reference of the head noun.

(19) Lin Zhinan, di yi ge cong qingda yuyansuo  
Lin Zhinan the first Cl from Tsinghua-university  
linguistics-institute  
biye de xuesheng  
graduate De student  
'Lin Zhinan, the first student who graduated from the linguistics institute of  
Tsinghua University'

In summary, Huang's argument for treating a post-DNC relative as a nonrestrictive is inadequate and the type of example given by him turns out to argue for restrictiveness rather than nonrestrictiveness of a post-DNC relative.

### 3. Arguments Against Post-DNC Relatives as Nonrestrictive Relatives

Del Gobbo (2001) and Zhang (2001) have recently provided some arguments against treating Chinese post-DNC relatives as nonrestrictive relatives. According to Del Gobbo, the literature has provided ten properties that might differentiate (English) restrictive relatives from nonrestrictive relatives.<sup>6</sup> These ten properties are summarized below (See Sells 1985, Ogle 1974, Ross 1967, Safir 1986, Emonds 1979).

I. While the antecedent of a nonrestrictive relative can be any maximal projection, the antecedent of a restrictive relative can only be an NP.

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<sup>6</sup> Del Gobbo (2001) originally uses the term "appositive" rather than "nonrestrictive". In this article, I will replace her "appositive" with "nonrestrictive" for the sake of consistency.

- II. While sentential adverbs can appear inside nonrestrictive relatives, they cannot occur inside restrictive relatives.
- III. While nonrestrictive relatives can modify pronouns, restrictive relatives may not.
- IV. While a quantified NP can be the antecedent of a restrictive relative, it is incompatible with a nonrestrictive relative.
- V. While a quantifier in the matrix clause can have scope over a pronoun in a restrictive relative, the same is not true for a nonrestrictive relative.
- VI. While a NP modified by a restrictive relative can be within the scope of a matrix negation, this is not so for a NP modified by a nonrestrictive relative.
- VII. While a nonrestrictive relative has to appear DP-finally, a restrictive relative need not to appear DP-finally.
- VIII. While restrictive relatives allow stacking, nonrestrictive relatives do not.
- IX. While nonrestrictive relatives can be used to qualify unmodified proper names, restrictive relatives can not.
- X. While nonrestrictive relatives allow pied-piping, restrictive relatives don't.

In addition to the above ten properties discussed by Del Gobbo, Zhang (2001) has discussed two other properties to differentiate nonrestrictive relatives from restrictive ones (cf. McCawley 1988, Demirdache 1991). They are:

- XI. While VP anaphora may include a restrictive relative, it may not include a nonrestrictive relative.
- XII. While restrictive clauses are in the scope of intensional verbs, nonrestrictive relatives are not.

On the basis of the above differences between English restrictive relatives and nonrestrictive relatives, Del Gobbo (2001) and Zhang (2001) have argued that if a relative, be it a post-DNC or a pre-DNC relative, passes a test allowed for restrictive relatives but not for nonrestrictive relatives, it is a restrictive relative in Chinese. On

the other hand, if Chinese does not have nonrestrictive relatives, then a sentence should be ungrammatical against properties allowed for nonrestrictive relatives but not for restrictive relatives. What are the facts? According to Del Gobbo and Zhang, what nonrestrictive relatives can do in English are not allowed in Mandarin Chinese and what restrictive relatives can do in English is also possible in Mandarin Chinese. Compare the following Chinese examples with their English counterparts in (21)-(32), taken from Del Gobbo (2001) and Zhang (2001). From these examples, they conclude that Chinese has no nonrestrictive relatives whatsoever, regardless of the order between DNC and the relative clause.

(21) Property I

- a. Mary was intelligent, which John never was.
- b. \*Zhangsan hen [Lisi conglai jiu bu de] congming.  
 Zhangsan very Lisi ever just not Rel smart  
 ‘Zhangsan is intelligent, which Lisi never was.’

(22) Property II

- a. The boys, who have frankly lost their case, should give up.
- b. \*[Wo tanbaideshuo kai de] zhe yi-liang qiche zhuangkuang  
 I frankly drive Rel this one-CL car condition  
 bu wanhao  
 not excellent  
 ‘The car that I frankly drive is not in an excellent condition.’
- c. \*Zhe yi-liang [wo tanbaideshuo kai de] qiche zhuangkuang  
 this one-CL I frankly drive DE car condition  
 bu wanhao  
 not excellent  
 ‘The car that I frankly drive is not in an excellent condition.’

(23) Property III

- a. We, who are women, think that you, who are men, should go now.
- b. \*We, who are women, think that we, who are men, should go now.
- c. Shi nuren de women jude shi nanren de nimen dei zou  
 be women Rel we think be men De you must leave  
 ‘Those among us who are women think that those among you who are men

should go.'

- d. Shi nuren de tamen juede shi nanren de tamen dei zou  
be women Rel they think be men Rel they must leave  
'Those among them who are women think that those among them who are  
men should go.'

(24) Property IV

- a. Every student that wears socks is a swinger.  
b. \*Every student, who wears socks, is a swinger.  
c. [Meiyige [chuan wazi de xuesheng]] dou shi tiaowude  
every wear socks Rel student all be dancers  
'Every student who wears socks is a dancer.'  
d. [Chuan wazi de [meiyige xuesheng]] dou shi tiaowude  
wear socks Rel every student all be dancers  
'Every student who wears socks is a dancer.'

(25) Property V

- a. \*Every Christian forgives John, who harms him.  
b. Every Christian forgives a man who harms him.  
c. [Meiyige xuesheng] dou yuanliang naxie [cengjing shanghai  
every student all forgive those formerly insult  
tamen de] ren  
them Rel people  
d. [Meiyige xuesheng] dou yuanliang [cengjing shanghai tamen de]  
every student all forgive formerly insult them Rel  
naxie ren  
those people  
'Every student forgives those who insult him.'

(26) Property VI

- a. I haven't met a girl that doesn't like to wear make up.  
b. \*I haven't met a girl, who doesn't like to wear make up.  
c. Wo meiyou kanjian yige [bu ai daban de] guniang.  
I not see one-Cl not love make-up Rel girl

'I haven't seen a girl that doesn't like to wear make up.'

- d. \*Wo meiyou kanjian [bu ai daban de] yige guniang.  
I not see not like make-up Rel one-Cl girl

(27) Property VII

- a. the girl that I saw, who John dislikes, is beautiful.  
b. \*the girl, who I saw, that John dislikes is beautiful.  
c. [wo kanjian de] nayige [Zhangsan bu xihuan de] guniang  
I see Rel that-one-Cl Zhangsan not like Rel girl  
hen piaoliang.  
very beautiful  
'The girl that I saw, who John dislikes, is beautiful.'

(28) Property VIII

- a. The tiger that I saw that I wanted to buy was expensive.  
b. \*The tiger, which was 5 weeks old, \*(and) which was fed twice a day, ate only fish.  
c. [Zhangsan bu xihuan de] [wo zuotian mai de] nayi-ben shu.  
Zhangsan not like Rel I yesterday buy Rel that-Cl book  
'The book that I bought yesterday that Zhangsan doesn't like'  
d. Nayi-ben [Zhangsan bu xihuan de] [wo zuotian mai de] shu.  
That-Cl Zhangsan not like Rel I yesterday buy Rel book  
lit. 'That book, which I bought yesterday, which Zhangsan doesn't like.'

(29) Property IX

- a. John, who you saw yesterday, is a good friend of mine.  
b. \*John who you saw yesterday is a good friend of mine.  
c. The John who you saw yesterday is a good friend of mine.  
d. ?[Ni zuotian kanjian de] Zhangsan shi wo pengyou.  
you yesterday saw Rel Zhangsan is my friend  
e. [Ni zuotian kanjian de] nage Zhangsan shi wo pengyou.  
you yesterday saw Rel that-Cl Zhangsan is my friend

- f. ?Nage [ni zuotian kanjian de] Zhangsan shi wo pengyou  
 that-Cl you yesterday saw Rel Zhangsan is my friend  
 ‘The Zhangsan you saw yesterday is my friend.’

(30) Property X

- a. \*Few windows here the curtains on which I really dislike let in enough light.  
 b. Few windows here, the curtains on which I really dislike let in enough light.  
 c. [Zhangsan renshi ta de mama de] nayige nuhai hen piaoliang.  
 Zhangsan know he Poss mother Rel that girl very beautiful  
 lit. ‘The girl whose mother Zhangsan knows is beautiful.’

(31) Property XI

- a. John sold a violin, which had once belonged to Nathan Milstein, to Itzhak Perlman, and Mary did [e] too.  
 [e] = ... sell a violin to Itzhak Perlman.  
 \*[e] = ... sell a violin, which had once belong to Nathan Milstein, to Itzhak Perlman
- b. Akiu yuanyi song-gei nu-pengyou liang ge jiezhi, liang ge  
 Akiu want give-to girl-friend two Cl ring two Cl  
 yuanlai shuyu muqin de jiezhi. Fanjin ke bu yuanyi e.  
 originally belong.to mother Rel ring Fanjinr rather not want  
 ‘Akiu wanted to give his girl friend two rings, which had once belonged to his mother, but Fanjin did not want to e.’  
 [e] = give his girl friend two rings  
 \*[e] = give his girl friend two rings which had once belonged to his mother
- c. Akiu yuanyi song-gei nu-pengyou [liang-ge yuanlai shuyu  
 Akiu want give-to girl-friend two-Cl originally belong.to  
 muqin de jiezhi], Fanjin ke bu yuanyi e.  
 mother Rel ring Fanjin rather not want Par  
 ‘Akiu wanted to give his girl friend two rings which had once belonged to his mother, but Fanjin did not want to e.’  
 [e] = give his girl friend two rings which had once belonged to his mother
- d. Akiu yuanyi song-gei nu-pengyou [yuanlai shuyu muqin

Akiu want give-to girl-friend originally belong.to mother

de liang ge jiezhi], Fanjin ke bu yuanyi e.

Rel two Cl ring Fanjin rather not want

‘Akiu wanted to give his girl friend two rings which had once belonged to his mother, but Fanjin did not want to e.’

[e] = give his girl friend two rings which had once belonged to his mother.’

(32) Property XII

a. John thinks that Mary loves Bill, who is a genius.

b. Da Bao renwei Akiu taoyan Lili he Mimi, zhe liang ge

Da Bao think Akiu dislike Lili and Mimi this two Cl

you caihua de tongxue

have talent Rel classmate

‘Da Bao thinks that Akiu dislikes Lili and Mimi, the two classmates who have talent.’

c. Da Bao renwei Akiu taoyan [liang ge you caihua de tongxue].

Da Bao think Akiu dislike two Cl have talent Rel classmates

‘Da Bao thinks that Akiu dislikes two classmates who have talent.’

d. Da Bao renwei Akiu taoyan [you caihua de liang ge tongxue].

Da Bao think Akiu dislike have talent Rel two Cl classmate

‘Da Bao thinks that Akiu dislikes two classmates who have talent.’

One remark is in order before I discuss the above tests for restrictiveness and nonrestrictiveness. The logic of the above tests is this. One kind of test shows that Chinese relatives exhibit properties of restrictive relative clauses seen in English restrictive relatives but not in nonrestrictive relatives. The other kind of test shows that no Chinese relative has the properties seen in English nonrestrictive relatives. Therefore, Chinese has only restrictive relatives but no nonrestrictive relatives. A caveat about Del Gobo’s Zhang’s above reasoning is that they seem to have assumed that the properties seen in English restrictive and nonrestrictive relatives are universal and hence Chinese should exhibit the same properties. However, there is no *a priori* reason that this should be true. In fact, as I will show later, nonrestrictive relatives in Chinese display properties different from English nonrestrictive relatives and the

difference might be a reflection of structural difference.

Of the tests listed above, properties IV, V, VI, VIII, XI, XII belong to the first type of test. Properties V and VIII are actually Lin's (1997) arguments for analyzing post-DNC (and pre-DNC) relatives as restrictive relatives. I already discussed property V when I reviewed Chao's (1968) discussion of Chinese relatives. This test clearly shows that post-DNC (and pre-DNC) relatives can be restrictive without a particular contrastive stress. As for property VIII, I would like to say something more here. Let us consider (33) below, where a proper name is modified by two relative clauses. Since the referent of a proper name is uniquely identified, the relative clauses in (33) must be nonrestrictive.

(33) You-zhe yi tou wuhei chang fa (??de) hui shuo  
have-Asp one head black long hair Rel can speak  
xibanyawen de Li xiaojie  
Spanish Rel Li Miss

'Miss Li, who has very black and long hair and who can speak Spanish...'

(33) sounds odd if both relative clauses are immediately followed by the relativization marker *de*. However, if the first *de* is deleted or is replaced by a conjunction word such as *erqie* 'and', the sentence seems quite acceptable. If (33) does involve two coordinated conjuncts with an omitted conjunction rather than a stacked construction with an omitted relativization marker, it will be a piece of evidence that nonrestrictive relatives in Chinese cannot be stacked. Unfortunately, I do not have a knock-down argument in favor of one analysis over the other. So this test should be applied with reservation. Whether or not nonrestrictive relatives in Chinese can be stacked depends upon how examples like (33) are analyzed.

Properties V and VI, and XI, XII are Del Gobbo's and Zhang's arguments, respectively. Consider property V first. According to this property, a quantifier in the matrix clause cannot have scope over a pronoun embedded to a nonrestrictive relative. This property is in fact falsified by Chinese data. Although Del Gobbo thinks that nonrestrictive relatives do not exist in Chinese, as I will argue later, this claim seems to be wrong. Nonrestrictive relatives are not only possible in Chinese—in fact, we have already seen one such example in (33)—but may allow a pronoun embedded to

them to be bound by a matrix quantificational NPs. Here is one such example.<sup>7</sup>

- (34) Mei-ge tongxue dou bu yuanyi gen xihuan shuo tamen  
every classmate all not willing with like say they  
hua hua de Xiaoming zuo zai yiqi  
bad words Rel Xiaoming sit on together  
'Everyone is not willing to sit together with Xiaoming, who likes to steal their  
things.'

This example indicates that Del Gobbo's property V is an invalid test.

But why is Chinese different from English on which Del Gobbo's test is based? In English, a nonrestrictive relative is separated from the remaining part of the sentence by a comma and thus behaves like an independent clause, blocking anaphoric binding from outside. However, in Chinese the nonrestrictive relative is an integrated part of a noun phrase due to the use of *de*. There is no comma to separate the main clause from the relative clause. Thus, when a noun phrase to which a relative clause is embedded is c-commanded by a quantificational NP, any element embedded to the relative clause is c-commanded by it too. This explains why (34) is a well-formed sentence.

Next consider the property VI. I agree with her that an indefinite NP with a Post-DNC relative can be within the scope of a matrix negation as (26c) shows. However, I do not think that this test can prove the nonexistence of nonrestrictive relatives in Chinese. When an indefinite NP (to the exclusion of the relative clause) is within the scope of negation, this means that the referent of that indefinite NP is not asserted to exist. It follows from this that a nonrestrictive interpretation of the relative clause is impossible, because nonrestrictive relatives are by definition used to provide additional information for identifiable referents. In other words, the impossibility of

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<sup>7</sup> Strictly speaking, one should use the pronoun *ta* instead of *tamen* to represent a binding relation. However, for some reason, the use of *ta* would make the sentence odd. This is not only true for the nonrestrictive relative that I use in (34) but also for the restrictive clause that Del Gobbo demonstrates. That's why Del Gobbo also uses *tamen* 'they' rather than *ta* 'he'.

nonrestrictive relatives in such constructions are ruled out for an independent reason. It doesn't mean that nonrestrictive relatives in Chinese do not exist.

As for property XI and XII, discussed by Zhang (2001), I do not think that they are reliable tests. According to Zhang (2001), English nonrestrictive relatives are not within the scope of VP anaphora. Thus, in (31a), the elided VP can only be a copy of the matrix VP, excluding the relative clause. It should be noted that following Canac & Tremblay (1996), Zhang (2001) has assumed that all relative clauses are restrictive relatives. The so-called nonrestrictive relatives are analyzed as nonrestrictive NPs with a restrictive relative modifying a null pronoun head. She refers to them as null-headed relatives (NHRs). In order to show that Chinese does not have nonrestrictive relatives, she first points out that Chinese relative clauses embedded to a nonrestrictive NP is not within the scope of VP anaphora, parallel to the English counterpart, as (31b) indicates. She then goes on to show that relative clauses not contained in nonrestrictive NPs must be within the scope of VP anaphora, as (31c) and (31d) indicate. Therefore, Chinese does not have the so-called nonrestrictive relatives. The problem with this argument is the judgment of (31b). According to Zhang's intuition, a Chinese relative embedded to a nonrestrictive NP is not within the scope of VP anaphora. However, the native speakers that I consulted—three graduate students and two college students—consistently said that the relative in (31b) can be construed as within the scope of VP anaphora. I do not know whether this is a dialectal difference between the Mainland Chinese dialect and the Chinese dialect spoken in Taiwan. But at least for the Chinese dialect that I speak in Taiwan, property XI cannot prove the nonexistence of nonrestrictive relatives. The last property within the first group of argument is property XII, also provided by Zhang (2001). This property shows that English nonrestrictive relatives are not within the scope of a matrix intensional verb. However, according to Zhang, in Chinese both pre- and post-DNC relatives are in the scope of a matrix intensional verb. Therefore, Chinese does not have nonrestrictive relatives. Honestly, this argument is hard to evaluate, because it is very difficult to tell by intuition whether or not the relative clause is in the scope of the intensional matrix verb. The same feeling is shared by one anonymous reviewer of this paper.<sup>8</sup>

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<sup>8</sup> The anonymous reviewer says

Next, consider the second type of argument, which tests properties that English nonrestrictive relatives possess against Chinese relatives. On Del Gobbo's view, if Chinese has no nonrestrictive relatives, then applying such properties to Chinese relative clauses should yield ungrammatical sentences regardless of the order between the DNC and the relative clause. According to her, this seems to be true, as her examples in (21), (22), (23), (27), (29) and (30) indicate. However, I have found that some of her examples are problematic and need to be reexamined. I turn to them now.

To begin with, consider property IX. According to Del Gobbo (2001) and Zhang (2001), in Chinese, when a relative clause modifies a proper name, the relative clause can only have a restrictive interpretation. This claim seems to be too strong, as it is easy to find examples in which a proper name can be modified by a nonrestrictive relative clause if there is no DNC. Some illustrating examples are given below.

(35) a. Xianglai jiu bu ai du shu de Xiaoming xianzai ye  
 always then not love study book Rel Xiaoming now also  
 kaishi du qi shu lai le  
 begin study begin book come Asp

'Xiaoming, who does not love to study, now also has begun to study.'

b. Shuo ye qiguai, bu ai chi niupai de Zhangsan jingran  
 say also strange not love eat steak Rel Zhangsan  
 surprisingly

ye dian-le niupai

also order-Asp steak

'How strange it is! Zhangsam, who does not love eating steaks, surprisingly also ordered a steak.'

c. Yongyou wuqian nian youjiu lishi wenhua de  
 possess five-thousand year age-old history culture Rel  
 zhongguo zhongyu juexing le  
 China finally awaken Asp

"I fully agree with the author that it is extremely difficult to evaluate whether or not the relative clause is in the scope of the intensional matrix verb. If there is no

‘China, which possesses age-old history and culture, is finally awakening.’

Examples such as those in (35) indicate that a Chinese relative clause can be interpreted as nonrestrictive when the antecedent of the relative is a proper name and no DNC appears.

It is important to point out that examples like (35) have actually been observed by Chu (1979), Tsai (1972) and Tsao (1986). These scholars suggest that the nonrestrictive usage of the relative clauses in examples like (35) probably arise as a consequence of the influence of English and other European languages. Zhang (2001) has adopted this position and hence excluded such constructions from her consideration of Chinese relatives. However, even if the speculation of language influence is true, the status of the nonrestrictive usage of Chinese relatives should be acknowledged in synchronic grammar, given that every native speaker can accept examples like (35). In fact, I would like to argue that the nonrestrictive usage of Chinese relatives in examples like (35) constitutes a part of true synchronic knowledge of Chinese speakers and hence should not be excluded from any analysis of Chinese relatives.

The distribution of nonrestrictive relatives is in fact not random. Consider (29) again, cited by Del Gobbo (2001) as somewhat unacceptable.

(29) ?Ni zuotian kanjian de Zhangsan shi wo-de pengyou  
you yesterday see REL Zhangsan be my friend  
‘Zhangsan, whom you saw yesterday, is my friend.’

Just like the examples in (35), in (29) the head noun modified by the relative is a proper name whose referent is uniquely identifiable. However, compared with those relative clauses in (35), the relative clause in (29) sounds somewhat odd. If the nonrestrictive usage of Chinese relatives is just a matter of westernization as Zhang (2001) has assumed, why can’t the relative clause in (29) also be a westernized relative? It must be emphasized that (29) is not the only example with an unacceptable nonrestrictive relatives. More examples of a similar sort are given

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clear-cut morphosyntactic evidence, property XII is a chimaera.”

below.

- (36) \*Zuo zai caodi shang de Zhangsan hen xihuan chouyan  
sit on grass above REL Zhangsan very like smoke  
'Zhangsan, who is sitting on the grass, likes to smoke very much.'
- (37) \*Xianzai mei kong de Lisi zheng zai xie boshi lunwen  
now not free REL Lisi right-now Prog write Ph.D thesis  
'Lisi, who is now not free, is writing his Ph.D thesis.'
- (38) \*Ganggang zai zhu fan de Mali turan die-dao zai  
just-now Prog cook rice REL Mary suddenly fall-off on  
di shang  
ground on  
'Mary, who was cooking just now, suddenly fell off on the ground.'

To my ears, (36)-(38) are very odd sentences. The contrast between those well-formed nonrestrictive relatives in (35) and those ill-formed nonrestrictive relatives in (29), (36)-(38) indicates that an account for (35) in terms of language influence is not adequate. The contrast seems to be systematic and some grammatical condition is at work here.

A clear distinction between those well-formed nonrestrictive relatives in (35) and those ill-formed nonrestrictive relatives is the following. The nonrestrictive relatives in (35) all characterize a more or less stable unchanging property, whereas the nonrestrictive relatives in (29), (36)-(38) all describe a temporary property. This suggests that a condition like the following might hold for the usage of Chinese nonrestrictive relatives.<sup>9</sup>

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<sup>9</sup> Zhang (2001) has cited examples like (i) as a grammatical sentence.

- (i) Tang zai bing-chuang-shang de Lu Xun hai zai xie wenzhang  
lie at sick-bed-on DE Lu Xun still Prog write article  
'Lu Xun was still writing articles when he was on his sickbed.'

If being on a sickbed is a temporary property, the condition stated in (39) might need to be revised. Examples like (i) are also a reason why I don't strengthen the sufficient

(39) Condition on Chinese Nonrestrictive Relatives

The use of a nonrestrictive relative in Chinese is felicitous if it describes a more or less stable unchanging property, i.e., an individual-level property.

If the above condition is correct, it suggests that the use of nonrestrictive relatives modifying a proper name is not a pure matter of translation or language change and should not be considered as a peripheral linguistic phenomenon, because it is subject to a precise and clear linguistic condition. I conclude that it is too strong a claim for Del Gobbo (2001) and Zhang (2001) to say that true nonrestrictive relatives in Chinese do not exist. The above discussion further supports the view that I put forth in Lin (1997), where I claim that nonrestrictive relatives are possible when the head noun modified is a proper name.

Next, the fact that speech act adverbs such as *tanbaideshuo* ‘frankley’ are not allowed to appear in Chinese relatives follows from a condition to the effect that they can only appear in a root clause. Thus, any type of subordinate clause does not license the use of *tanbaidishuo* ‘frankley’. For example, the adverb *tanbaidishuo* ‘frankley’ cannot appear in a complement clause.

(40) \*Wo renwei tanbaideshuo Lisi bu chengshi

I think frankly Lisi not honest

‘I think that frankly Lisi is not honest.’

If this is correct, then the ungrammaticality of Del Gobbo’s (22b,c) is not related to the restrictive vs. nonrestrictive distinction just as the ungrammaticality of (40) is not.

To further strengthen the counterargument here, it is worth pointing out that

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condition in (39) to a sufficient and necessary condition. Examples like (i) may indicate that the condition in (39) is gradually loosened so that some stage-level relatives are becoming acceptable for nonrestrictive interpretation. This would support the view that nonrestrictive modification is indeed a kind of language change. But this is not incompatible with the claim that nonrestrictive modification is part of the synchronic grammar of Chinese nowadays.

speech act adverbs are not allowed to appear in a relative clause which modifies a proper name. Thus, (41b) is ungrammatical, even though the relative clause should be understood as being nonrestrictive.

- (41) a. Tanbaidishuo wo bu xihuan [yongyou wu qian nian  
 Honestly I not like own five thousand year  
 youjiu wenhua de] zhongguo  
 aged-old culture Rel China  
 ‘Honestly, I do not like China, which has an aged-old culture for five thousand years.’
- b. \*Wo bu xihuan [tanbaidishuo yongyou wu qian nian  
 I not like honestly own five thousand year  
 youjiu wenhua de] zhongguo  
 aged-old culture Rel China  
 ‘I do not like China, which honestly has an aged-old culture for five thousand years.’

The contrast between (41a) and (41b) clearly indicates that speech act adverbs may not be used as a test for Chinese nonrestrictive relative clauses.<sup>10</sup>

A third property that English nonrestrictive relatives possess but restrictive relatives do not is pied-piping. However, this property is irrelevant to Chinese, because Chinese does not have overt wh-movement at all. Therefore, this property does not play any role in determining whether or not Chinese has nonrestrictive relatives.

So we are now left with property I, III and property VII. Consider property III

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<sup>10</sup> The ungrammaticality of (41b) raises a very interesting question as to why English nonrestrictive relatives allow a speech act adverb. My conjecture is this. According to McCawley (1993: 295), nonrestrictive relatives in English belong to a separate speech act which is different from the main clause speech act. If McCawley is correct, it is no surprise that speech act adverbs appear in English nonrestrictive relative clauses. This account suggests that Chinese nonrestrictive relatives do not have an independent speech act as English nonrestrictive relatives. Very likely, this is due to the fact that Chinese nonrestrictive relatives are not separated from the other parts of the sentence by a comma.

first. According to Del Gobbo (2001), though Chinese relative clauses are like English relative clauses in being able to modify pronouns, the former, unlike the latter must be construed as restrictive, because the contrast between the English example (23b) and the Chinese example (23d). The problem with this argument is this: Is (23d) really an acceptable sentence? It might be acceptable but there must be two groups of referents independently delimited. In other words, the two pronouns *tamen* ‘they’ in (23d) must refer to two different groups of people each of which is independently identified. If the context identifies all the referents denoted by the two *tamen* ‘they’ as one group of referent, (23d) is not felicitous. If this intuition is correct, the grammaticality of (23d) does not prove that the relative clauses in question are not nonrestrictive. In fact, under this interpretation, they are nonrestrictive. So I do not think that property III can prove the nonexistence of nonrestrictive relatives in Chinese.

As for property VII, I agree with Del Gobbo (2001) that a nonrestrictive relative should occur outside a restrictive relative not only because English must follow this order but because this order is semantically demanded as Partee’s (1976) analysis of English relative clauses has implied, which I will discuss later. It should be pointed out, however, that the argument here does not refute the possibility that a pre-DNC relative can be nonrestrictive, a point not mentioned by Del Gobbo (2001). This argument also seems to say nothing about nonrestrictive relatives modifying a proper name. Thus, it cannot deny the existence of nonrestrictive relatives modifying a proper name.

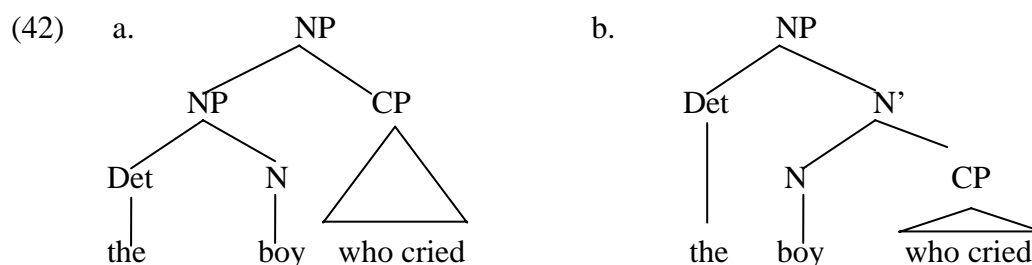
Finally, property I also doesn’t seem to constitute a strong argument for the nonexistence of nonrestrictive relatives in Chinese. It is probably true that there is no Chinese relative that modifies a non-Noun projection. However, from this it cannot be concluded that Chinese lacks nonrestrictive relatives. A crucial property about Chinese relative clauses is the use of *de*, which is attached to every relative clause. Although it is controversial as to how one should analyze *de*, every Chinese linguist would agree that *de* is not equivalent to English relative pronouns. The function of *de* is to link a modifier XP to a nominal element. Thus, the requirement that a relative clause in Chinese always modifies a nominal projection but no other projection is a consequence of the linking element *de*. It has nothing to do with whether or not nonrestrictive relatives exist in Chinese.

Summarizing this section, among all the arguments against the existence of nonrestrictive relatives in Chinese produced by Del Gobbo (2001) and Zhang (2001), I have found none of them convincing enough. It is also argued that Chinese actually has nonrestrictive relatives when the modified antecedent is a proper name. This suggests that the claim that Chinese has no nonrestrictive relatives, if true at all, only applies to relative clauses occurring with a DNC, a conclusion which is different from Del Gobbo (2001) and Zhang (2001) but is consistent with Lin (1997).

#### 4. A Semantic Argument Against Existence of Nonrestrictive Relatives with a DNC Modifier

Most of Del Gobbo's and Zhang's arguments against the existence of nonrestrictive relatives (with a DNC) in Mandarin Chinese are syntactic arguments. In this section, I will produce a semantic argument from the viewpoint of semantic composition.

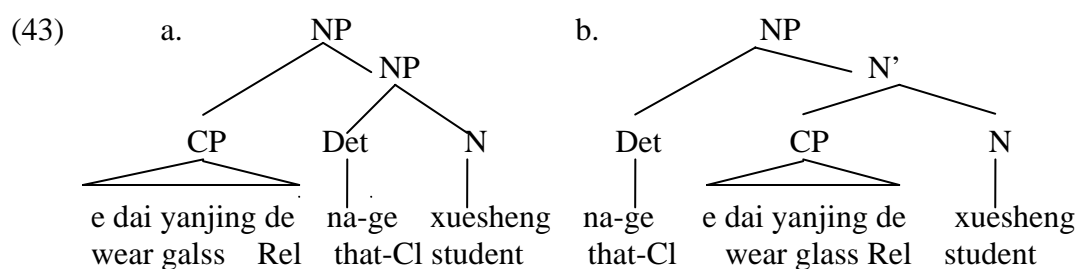
In 1970's two different constituent structures proposed for NPs containing a restrictive relative clause in English are (42a) and (42b).



In discussing which of the above structures is semantically more reasonable for restrictive relatives, Partee (1976) has argued that (42b) but not (42a) lends itself most easily to a compositional account of the semantics of a restrictive relative clause, because by modifying N, the relative clause limits the reference of the NP containing it to a subset of the individuals denoted by N. In other words, the function denoted by the article *the* applies to the translation of N' rather than to that of N. Thus, the uniqueness requirement of *the* is relative to the extension of *boy who cried*, not to the extension of *boy*. This analysis has been adopted or argued for by many other authors (McCawley (1988), Heim and Kratzer (1998), for example). In contrast, in (42a), the definite article *the* forms a constituent with the common noun *boy*, so the function

denoted by *the* applies to the extension of *boy* only, entailing that uniqueness is relative to the extension of *boy*. It follows that the relative clause does not play a role in determining the referent of the whole NP. Rather, it only ascribes an additional property to the unique referent which is independently delimited. The structure is thus more suitable for the compositional semantics of nonrestrictive relatives and has actually been adopted by authors such as Rodman (1976), Cornilescu (1981), Ungar (1984), among others.<sup>11</sup>

Returning to Chinese data like (2), the structure of (2a) and (2b) should look something like (43a) and (43b) respectively, ignoring the irrelevant details.



The two structures in (43) exactly correspond to the two structures in (42). Now recall that Chao (1968) and Huang (1982) claim that post-DNC relatives, i.e., (43b), are (or can be) nonrestrictive, whereas pre-DNC relatives are restrictive. Interestingly enough, their claims are just opposite to what Partee (1976) has argued for. If Partee's remark about the two structures in (42) is correct, under the thesis that semantics is compositional and the input of semantics is syntactic structures, it is really difficult to imagine how the determiner *na* 'that' in (43b) can semantically combine with the noun *xuesheng* 'boy', disregarding the semantic contribution of the intervening relative clause. Semantic composition thus argues against post-DNC relatives being analyzed as nonrestrictive relatives.

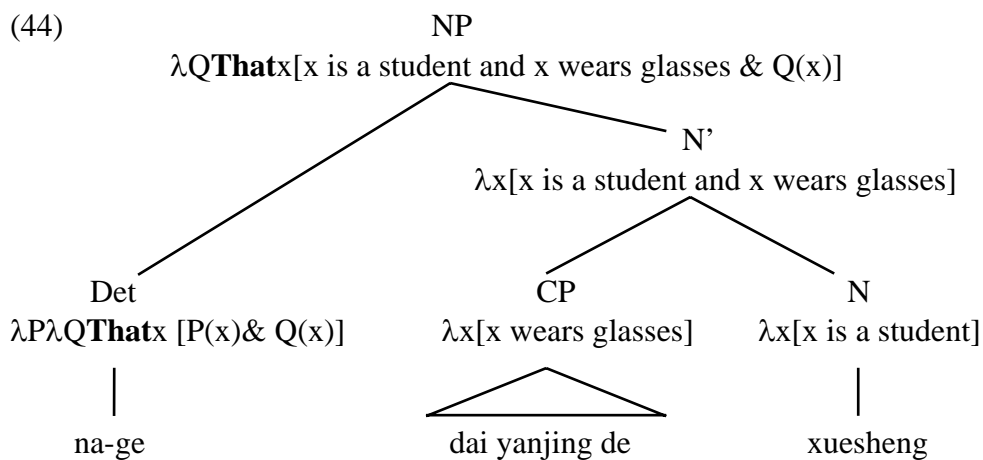
## 5. Problems with Pre-DNC Relatives

As noted in the last section, according to Partee (1976), the structure (43a), but not (43b) is a more appropriate structure for semantic composition of nonrestrictive

<sup>11</sup> Not every author assumes the structure (42a) for NPs containing a nonrestrictive relative. For example, McCawley (1988) has a different proposal in which the

relatives. Yet, if one looks at the literature on Chinese relative clauses, almost no linguist except Tsai (1994) claims that a pre-DNC relative is nonrestrictive. This raises two questions. First, if pre-DNC relatives are restrictive rather than nonrestrictive, this is also contrary to Partee's ideal structure of restrictive semantic composition. Then how come restrictive semantic composition is possible? Second, is a pre-DNC relative really nonrestrictive as Tsai claims? Is his evidence cogent? I take these two questions in turn now.

To begin with, let me first show how standard semantic composition may handle restrictive modification for a structure like (43b). In order to show the computation, let us assume, for the sake of simplicity, that the meaning of *na* is  $\lambda P\lambda Q\mathbf{That}x[P(x) \text{ and } Q(x)]$ . The bold **That** is something like an iota operator which has a uniqueness requirement like the English article *the*. Moreover, let us assume that a relative clause is translated as a property, i.e.,  $\lambda x[x \text{ wears glasses}]$  in the case of (43b), as is usually assumed for English relative clauses. Then the composition of (43b) is as follows.



The only thing that needs to be clarified here with respect to the above semantic composition is the interpretation of the N' node. Here, functional application cannot apply because both the CP and the common noun are of  $\langle e,t \rangle$  type. I assume with Heim and Kratzer (1998) that the theory of grammar has a rule called Predication Modification, which is given in (45). This rule will take care of the semantic composition of the N' node in (44).

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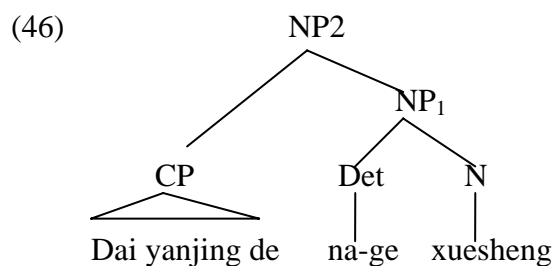
nonrestrictive relative does not form a constituent with its head NP.

(45) Predicate Modification

If  $\alpha$  is a branching node,  $\{\beta, \gamma\}$  is the set of  $\alpha$ 's daughters, and  $[[\beta]]$  and  $[[\gamma]]$  are both in  $D_{\langle e, t \rangle}$ , then  $[[\alpha]] = \lambda x. [[\beta]](x) = [[\gamma]](x) = 1$ .

Everything else is straightforward.

Now consider (43a). This structure poses a problem for a restrictive interpretation of the relative clause. In order for the relative clause to be restrictive, the meaning of the NP *na-ge xuesheng* 'that student' has to include the meaning of the relative clause *dai yanjing de* 'who wear glasses', even though the latter occurs higher in tree structure than the head NP. But this is impossible, because the property variable  $P$  in the translation of the determiner *na-ge* 'that' will be substituted for by the property denoted by the common noun, once the determiner and the common noun hit each other. A solution to this problem is hinted in Bach and Cooper's (1978) analysis of relative constructions. (See also Cooper (1979) and McCloskey (1979).) Bach and Cooper have argued that although Partee's remark on the structures (42a) and (42b) is reasonable, (42a) can still be the structure for restrictive modification. The way they do it is to postulate a free property variable inside the translations of determiners. This property variable is abstracted over by a lambda-operator when the translation rule applies to combine the translation of the head NP with the translation of the relative clause. The resultant function then applies to the property denoted by the relative clause and lambda conversion will replace the free property variable by the translation of the relative clause. Using (46) as an example, the process looks like the following.



Det' =  $\lambda P \lambda Q \text{That} x [[P(x) \wedge R(x)] \& Q(x)]$

$N' = \lambda x[x \text{ is a student}]$

$NP_1' = \lambda Q\mathbf{That}x[[x \text{ is a student} \wedge R(x)] \& Q(x)]$

$CP' = \lambda x[I \text{ know } x]$

$NP_2' = \lambda R(NP_1')(CP')$

$= \lambda Q\mathbf{That}x[[x \text{ is a student} \wedge I \text{ know } x] \& Q(x)]$

Given Bach and Cooper's idea, it is now easy to see why restrictive interpretation of a relative clause outside a determiner is possible in Mandarin Chinese. (Also see Lin (1997) and Wu (1997) for a similar idea.)

It should be noted in passing that adding a property variable to the translation of a determiner is not an *ad hoc* device, as McCloskey (1979) has pointed out. It is an old observation that the interpretation of quantifiers and determiners is context-dependent. Consider a sentence like (47). This sentence is clearly not about all the students in the world. There must be some implicit limitation on the set over which the quantifier ranges. For example, if we are talking about the students in my department who went to a party last night. Then the students over which the universal quantifier ranges can only be those students who went to the party.

(47) Every student had a great time.

This context-dependency can be nicely captured by introducing to the usual translations of determiners an extra property variable whose value is filled by a variable assignment. However, if there is overt linguistic material denoting a property around the property variable, the variable can be filled by that property. This is the case that I discussed in (42).<sup>12</sup> In fact, Chinese relative constructions can be said to provide further support to Bach and Cooper's analysis of relative constructions.

Having demonstrated that there is no difficulty in assigning a restrictive semantics to Chinese pre-DNC relatives, I now turn to show that Tsai's claim of pre-DNC relatives as nonrestrictive relatives is not necessarily correct.

Tsai (1994: 155) has given the following two examples to illustrate the

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<sup>12</sup> For a solution to the iteration problem of restrictive relative clauses, see Bach and Cooper (1978).

restrictive and nonrestrictive relative clauses, respectively.<sup>13</sup>

(48) a. Akiu zai xie na-(yi)-ben dajia dou hui xihuan de shu  
Akiu Prog write that-one-Cl people all will like Rel book  
'Akiu is writing that book which everybody will like.'

b. Akiu zai xie dajia dou hui xihuan de na-(yi)-ben shu  
Akiu Prog write people all will like Rel that-one-Cl book  
'Akiu is writing that book, which everybody will like.'

Quoted below is what he says about these two sentences:

“As shown by (61a) [= my (48a)], when a relative clause appears lower than a determiner, i.e., the definite specifier *na-ben*, the reading is restrictive. It could be the case that there are several books which *Akiu* is planning to write, and (61a) asserts that he is writing the would-be-popular one. In comparison, when a relative clause appears higher than a determiner, as in (61b), the reading is nonrestrictive. What is asserted here is that *Akiu* is writing a book which is salient in the context, and the book will be popular.” (Tsai 1994:155-156)

In addition to the above remark, he also provides the following contrast as supporting evidence for his claim.

(49) a. Akiu zai xie yi-ben dajia dou hui xihuan de shu  
Akiu Prog write one Cl people all will like Rel book  
'Akiu is writing a book which everybody will like.'

b. \*Akiu zai xie dajia dou hui xihuan de yi-ben shu  
Akiu Prog write people all will like Rel one-Cl book  
'Akiu is writing a book, which everybody will like.'

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<sup>13</sup> Tsai's original examples do not contain the numeral *yi* 'one'. This slight difference does not change anything, as the numeral *yi* 'one' is optional when it follows a demonstrative.

The two examples in (49) minimally differ from the two examples in (48) only in the absence of the demonstrative *na* ‘that’. The reason why the contrast in question is an argument for treating pre-DNC relatives as nonrestrictive relatives is this. English determiner *some* can be construed as strongly quantified (presuppositional) or weakly quantified (cardinal). According to Tsai, only strongly quantified *some*, indicated by SOME in (50a), but not weakly quantified *some*, indicated by *sm* in (50b), may be modified by a nonrestrictive relative.

(50) a. SOME/Sm fool who has a big head got stuck in the manhole.

b. SOME/\*Sm fool, who has a big head, got stuck in the manhole.

(Tsai 1994: 152)

Tsai provides an interesting story for the contrast between (50a) and (50b), whose details need not concern us here. What is crucial here is that the contrast between the Chinese examples (49a) and (49b) seems to parallel the contrast between the English examples (50a) and (50b). Indeed, Tsai has extended his account for (50) to (49). On his analysis, if post-DNC relatives are nonrestrictive relatives, then one can ascribe ungrammaticality of (49b) to the same cause that excludes (50b) with the weak *some*.

Is Tsai’s argument for treating pre-DNC relatives as nonrestrictives convincing? Let us consider (48b) first. It is a pity that though Tsai mentions that (48b) can be used in a context in which a book is salient, he actually does not give a concrete example to illustrate this. This is very important, however. To see this, let me first demonstrate an anaphoric use of *na* ‘that’ in Mandarin Chinese. In this usage, the reference of a noun phrase containing the demonstrative *na* ‘that’ is established by a linguistic or a non-linguistic act (Teng 1981). An example is this. Suppose John went shopping with Bill yesterday. John bought a new dress for himself. Today Bill saw John again and asked him the question (51a) or (51b).

(51) a. Ni    weishenme    mei    chuan    ni    zuotien    mai    de    na-jian  
       you    why            not    wear    you    yesterday    buy    Rel    that-Cl  
       xin    yifu    (ne)  
       new    dress    Q

‘Why don’t you wear the new dress that you bought yesterday?’

- b. Ni weishenme mei chuan na-jian ni zuotien mai de  
 you why not wear that-Cl you yesterday buy DE  
 xin yifu ne  
 new dress Q  
 ‘Why don’t you wear the new dress that you bought yesterday?’

In this context, the function of the demonstrative *na* ‘that’, irrespective of the order between it and the relative, is much like that of the English definite article *the*. A felicity condition for the use of the definite article *the* is that the information contained by the linguistic material following it must participate in establishing the familiarity which warrants the speaker’s use of *the* (Bache and Jakobsen 1980, Heim 1982) Consider the contrast between (52a) and (52b).

- (52) a. The man who broke the bank at Monte Carlo is a mathematician.  
 b. The man, who broke the bank at Monte Carlo, is a mathematician.

Bache and Jakobsen (1980: 262)

According to Bache and Jakobsen, what distinguishes (52a) from (52b) is the extent to which the head noun and the relative clause contribute to the familiarity presupposed by the definite article. In (52a), the information expressed by the relative clause is familiar to both the speaker and the hearer, whereas in (52b), only the information expressed by the common noun is familiar to both the speaker and the hearer but not the information expressed by the relative clause. According to Bache and Jakobsen, when the information expressed by a relative clause is part of the familiarity required by the definite article *the*, it is a restrictive relative clause and is used to help identify the referent.

Returning to Tsai’s example (48b), it seems to me that the use of the relative clause must be familiar for both the speaker and the hearer in any context that I can think of. In other words, the relative clause in (48b) is part of the familiarity required by the anaphoric *na* ‘that’. If this is correct, this means that the relative clause in Tsai’s example (48b) is restrictive rather than nonrestrictive.

The claim that Chinese relative clauses occurring with an anaphoric demonstrative cannot be nonrestrictive relatives is also supported by data like (53).

- (53) a. Wo zuotien mai-le yi-ben shu. Na-ben shu hen gui  
 I yesterday buy-Asp one-CL book that-CL book very expensive  
 ‘I bought a book yesterday. That book is very expensive.’
- b. Wo zuotien mai-le yi-ben shu. \*(Na-ben) Tang jiaoshou  
 I yesterday buy-Asp one-CL book that-CL Tang professor  
 xie de (na ben) shu hen gui  
 write Rel that-CL book very expensive  
 ‘I bought a book yesterday. The book, which was written by Professor Tang,  
 is  
 very expensive.’

As (53a) shows, an NP with the demonstrative *na* ‘that’ can refer back to an indefinite. However, if the NP contains a relative clause as in (53b), the discourse becomes incoherent, because the NP with the demonstrative now seems to refer to a book which is different from the one previously mentioned. This situation is in sharp contrast with the following English discourse in which the second NP can naturally refer back to the first NP.

- (54) I bought a book yesterday. The book, which was written by Professor Tang, is very expensive.

The contrast between (53a) and (53b) strongly indicates that Chinese prenominal relative clauses occurring with a demonstrative cannot function as nonrestrictive modifiers.

But what about Tsai’s argument for treating pre-DNC relatives as nonrestrictives as given in (49)? I would like to argue that the contrast between (49a) and (49b) is not necessarily related to the restrictive vs. nonrestrictive distinction. Recall that Bach and Cooper (1978) have argued that the meaning of determiners may carry a free property variable which is given a value later in the derivation of semantic composition. I have shown that a pre-DNC relative in Chinese utilizes exactly this mechanism to accomplish restrictive modification. I suggest that this property is relevant to the ungrammaticality of (49b). Suppose that all pre-DNC

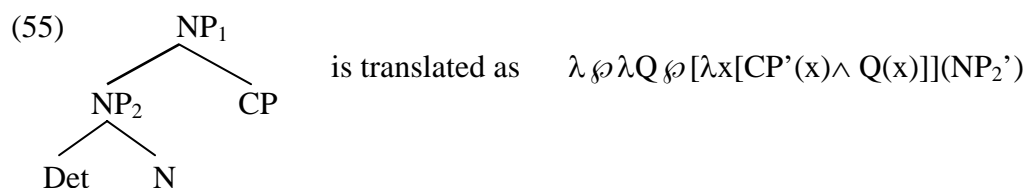
relatives must be restrictive as Del Gobbo (2001), Zhang (2001), Huang (1982) and Chao (1968), etc., have claimed. Then the ungrammaticality of (49b) can be explained as follows. Unlike the demonstrative *zhe* ‘this’ or *na* ‘that’, the numeral *yi* ‘one’ in (49b) is not a determiner, as it can occur with a demonstrative or other determiners such as *mei* ‘every’. We have already seen this in (49a). If *yi* ‘one’ is not a determiner but a predicate as is sometimes proposed, then it will not carry a free property variable as other determiners such as *na* ‘that’ or *mei* ‘every’ do. The ungrammaticality of (49b) thus follows, because for a relative clause to appear in the NP-initial position, a free property variable of the kind suggested by Bach and Cooper must be available. If this account for (49b) is correct, it weakens the force of Tsai’s argument for treating a pre-DNC relative as a nonrestrictive relative on the basis of the contrast between (49a) and (49b).

## 6. Semantic Composition of Nonrestrictive Relatives in Mandarin Chinese

In section 3, I showed that Chinese in fact has nonrestrictive relatives when the modified head noun is a proper name (or pronoun). In this section, I will briefly outline the semantic composition of such constructions.

Various assumptions have been made about the syntactic relation between a nonrestrictive relative and its antecedent in English. Ross (1967) analyzes nonrestrictive relatives as independent clauses. Jackendoff (1977) proposes that nonrestrictive relatives are syntactically higher than restrictive relatives and the head noun that it modifies. Emonds (1979) and Vries (2000) assume that nonrestrictive relatives are conjuncts. Demirdache (1991), on the other hand, claim that nonrestrictive relatives are NP-adjuncts, which are lifted at LF out of the NP containing them and adjoined to the root clause. As noted, Chinese nonrestrictive relatives modifying a proper name should form a single constituent with the proper name. Thus, I would like to assume that nonrestrictive relatives in Mandarin Chinese are adjoined to an NP and are immediately dominated by another NP. In what follows, I will show that there is no difficulty in getting a nonrestrictive semantics for such a structure within a framework of formal semantics. In fact, Rodman (1976) and Cornilescu (1981) have already shown how a nonrestrictive semantics may be obtained through such a structure. Their proposals look something like the

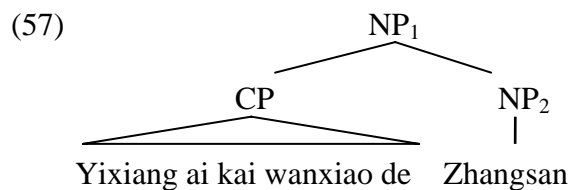
following.<sup>14</sup>



This analysis can be directly extended to Chinese. Consider (56), an example of nonrestrictive modification.

(56) Yixiang ai kai wanxiao de Zhangsan  
 always love make joke DE Zhangsan  
 ‘Zhangsan, who always likes making jokes, ...’

The structure of (56) is (57).



Applying the semantic rule stated in (55) to (57), we obtain the following step-by-step composition.

(58)  $\lambda \wp \lambda Q \wp [\lambda x [\lambda y [y \text{ likes making jokes}](x) \wedge Q(x)]](\lambda PP(\text{Zhangsan}))$   
 $= \lambda Q \lambda PP(\text{Zhangsan})[\lambda x [\lambda y [y \text{ likes making jokes}](x) \wedge Q(x)]]$   
 $= \lambda Q \lambda PP(\text{Zhangsan})[\lambda x [x \text{ likes making jokes} \wedge Q(x)]]$   
 $= \lambda Q [\lambda x [x \text{ likes making jokes} \wedge Q(x)]](\text{Zhangsan})$   
 $= \lambda Q [\text{Zhangsan likes making jokes} \wedge Q(\text{Zhangsan})]$

Once the last line in (58) is applied to a VP or a property, two conjoined clauses will

<sup>14</sup> Rodman’s (1976) and Cornilescu’s (1981) original translations are written within an intensional framework. In this paper, I use an extensional translation here. Also, in their original translation rule, there is no variable  $x$  following the translation of CP.

result. The interpretation is then one that most linguists seem to agree with.

## 7. Concluding Remarks

I have so far reviewed existing arguments for and against treating pre-DNC or post-DNC relatives as nonrestrictive relatives in the literature. I have shown that Huang's argument for analyzing post-DNC relatives is not convincing; nor is Tsai's argument for analyzing pre-DNC relatives as nonrestrictive relatives cogent. On the other hand, I have also shown that Del Gobbo's (2001) and Zhang's (2001) arguments against the existence of nonrestrictive relatives are not adequate. I have provided many examples showing that when the antecedent of a relative is a proper name or a pronoun, the nonrestrictive interpretation is allowed and that such examples should be treated as part of synchronic grammar. Taking all these together, the picture of Chinese nonrestrictive relatives is the following:

- (59) When a (determiner)-numeral-classifier (DNC) appears, a relative clause cannot be nonrestrictive regardless of the order between the DNC and the relative clause. When no DNC appears, the relative clause can be nonrestrictive if it characterizes a more or less permanent property.

If the generalization in (59) is correct, it raises a very interesting question. Why does the generalization hold and where can it be derived? Honestly, I am not in a position to answer the question at the present moment. However, it is worth making some more remarks on Del Gobbo's (2001) and Zhang's (2001) papers, which contain discussions relevant to the question under discussion.

After having claimed that Chinese has no nonrestrictive relatives, both Del Gobbo and Zhang have offered an answer to the question of why unlike English Chinese has no nonrestrictive relatives at all. Roughly, Del Gobbo's answer is this. She takes the relative pronoun in the nonrestrictive relative to be either a referential pronoun or an E-type pronoun. Moreover, she assumes that the antecedent to a referential or E-type should precede the pronoun. This requirement can be satisfied in English because English relatives follow their antecedents. But Chinese relatives are prenominal. The head of the relative clause follows the relative operator and is

therefore prevented from getting its denotation from the context. On the other hand, Zhang's account for the contrast between English and Chinese relatives relies on the presence or absence of (overt) relative pronouns. According to her, nonrestrictive relatives are licensed only if an overt relative pronoun is present. Thus, while (60a) is acceptable, (60b) is not, as noted by Jackendoff (1977: 171).

(60) a. Jane, whom you met at the party, is brilliant.

b. \*Jane, you met at the party, is brilliant.

She also notes that the function of a relative pronoun in nonrestrictive relatives cannot be replaced by other elements such as a complementizer, as (61) indicates.

(61) \*Jane, that you met at the party, is brilliant.

Given the data in (60) and (61), Zhang suggests that the reason why Chinese has no nonrestrictive relative is exactly the same as why (60b) and (61) are ungrammatical in English; namely, Chinese has no overt relative pronouns at all.

Although Zhang (2001) has explicitly assumed that examples like (35) are a product of language change and should not be considered seriously in analyzing Chinese relatives, I have argued that such examples constitute a part of true linguistic knowledge of synchronic grammar and should not be treated as peripheral linguistic phenomenon. If this view is correct, then Del Gobbo's and Zhang's analyses are inadequate, because both analyses wrongly exclude examples in which a nonrestrictive relative modifies a proper name or a pronoun. This suggests that one still has to seek a different analysis that may account for the generalization in (59). I will leave this to another research in the future.

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