

An Observation on Chinese Reflexives

Horng-Ming Wu

Abstract

This paper aims to present evidence that a long-distance anaphor *ziji* 'self' and a short-distance anaphor pronoun+*ziji* 'himself, yourself, ourselves, etc.' may be free from binding everywhere in a sentence, which turns out not to obey binding condition A of the binding theory. It thus demands an explanation under the notion of binding.

We will observe certain uncommon binding and non-c-commanding phenomena concerning the two reflexive anaphors and then will examine some suggested possible solutions relating to the binding of the reflexives in Chinese. As the approaches we review in this paper fail to satisfactorily provide an adequate account for the phenomena, a possible explanation will be instantaneously proposed in the third section of this paper. In this paper we assume that there may exist two types of reflexive *ziji* in Chinese: one is a true *ziji*, which has the reflexive form throughout the entire application, from D-Structure to Logical Form; the other *ziji* may be a pronoun *ta* at D-Structure and S-Structure. By the operation of a replacement mechanism between the level of S-Structure and Logical Form, *ziji* is present at LF representation thereby explaining the non-binding and non-c-commanding problems.*

Key words: Reflexives, Binding, Anaphors, C-command

* I am grateful to an anonymous JCLA reviewer for the helpful comments made on this paper. The author is certainly responsible for any remaining errors.

An Observation on Chinese Reflexives

0. Introduction

There are two types of reflexives in Chinese: the plain form *ziji* ‘self’ and the compound form pronoun+*ziji* ‘himself, yourself, ourselves, etc.’ The former is known as long-distance reflexive, whereas the latter is short distance reflexive,¹ as illustrated in (1).

(1) a. Long-distance reflexive

張太太；承認李四婚前常常到自已；的家門口站崗

Zhangtaitai; chengren Lisi hunqian changchang

Ms Zhang admit Lisi before getting married often

dao ziji; de jia mendou zhangang.

go to self ‘s home entrance wait

“Ms Zhang admitted that before they’d got married Lisi often went to her home entrance to wait for her coming home.”

¹ Depending on the preference of the author, the two types of reflexive anaphors have been variously termed as follows:

(i) *ziji* ‘self’:

long-distance reflexive, bare reflexive, monomorphemic reflexive, nonphrasal reflexive.

(ii) pronoun+*ziji* ‘himself, yourself, etc.’:

short-distance reflexive, compound reflexive, polymorphemic reflexive, phrasal reflexive.

b. Short-distance reflexive

張三認為李四；害了他自己；

Zhangsan renwei Lisi; hai le taziji;

Zhangsan thought Lisi harm ASP himself

“Zhangsan thought that what Lisi harmed was Lisi himself.”

In general the relation of anaphors to their antecedents is assumed to fall under the syntactic binding condition A: an anaphor must be bound in a local domain (Chomsky, (1996)). However, there exist data, primarily concerning Chinese reflexive anaphors, showing that in some grammatical sentences a reflexive may have no syntactic binder either in its local domain or sometimes even in the entire sentence. As we shall see in the section that follows, in certain situation it is very difficult to distinguish those Chinese reflexive anaphors that are structurally constrained from those that are constrained by, say, non-structural consideration. In this way, solely depending on the binding theory to explain their coreferential relation may seem to be insufficient.

This paper aims, first, to examine data concerning Chinese reflexive anaphors, which show that both *ziji* and pronoun+*ziji* can be free (from binding). Since binding condition A demands that an anaphor must be coindexed with an antecedent somewhere in a local zone, a reflexive without a binder in a local domain or even in the entire sentence obviously violates the binding theory. Second, the relation between the binding properties of Chinese reflexives and the theory of binding will then be discussed; and finally, a possible explanation for the Chinese reflexive *ziji* will be suggested.

1. A closer observation

1.1. Some problematic structures

There exists a phenomenon in Chinese, which shows that neither binding condition A of the binding theory of Chomsky (1996) (i.e. an anaphor must be bound in its local domain) nor what Latridou (1986) called binding condition D (i.e. long-distance binding), nor what Cole, Hermon and Sung (1990) argued for could offer a favorable explanation to the phenomenon. For example, observe the following sentences in (2).

(2) a. 自己_i支持張三_j的原因是他_j以前也支持過我_i。

ziji_i zhichi Zhangsan_j de yuanyin shi ta_j yiqian ye zhichi-guo wo_i.

self support Zhangsan POSS reason is he before also support-ASP I

“The reason that I supported Zhangsan was that he too supported me before.”

b. 張三_j曾是自己_{i/*j}的救命恩人。

Zhangsan_j cengshi ziji_{i/*j} de jiuming enren

Zhangsan once self 's save life benefactor

“Zhangsan was my benefactor for he had saved my life.”

c. 張三_i不滿李四_j在背後毀謗自己_{i/*j}。

Zhangsan buman Lisi zai behou huibang ziji

Zhangsan resent Lisi at back slander self

“Zhangsan resented Lisi’s slandering him behind his back.”

In all these sentences, the so-called long distance anaphors *ziji* are not only free in their local domains (as in 2a and 2c), they are also free from indexing in the whole sentences (as in 2b). One question arises then: how long or how far the binder of anaphor *ziji* in a sentence should be? In the following sections, let's first review certain existing binding explanations relating to Chinese reflexives.

1.2. Some earlier work concerning Chinese reflexives

Cole, Hermon and Sung (1991) argue that since *infl* is lexical in Chinese, the antecedents of reflexives that are bound far outside their local domains may be given an account for by *infl*-to-*infl* movement (i.e. head to head movement). In consequence of the movement, the reflexive's long-distance binding effects can be explained. (3) is an example.

(3) 張三_i 認為李四_j 知道王五_k 討厭自己_{i/j/k}。

Zhangsan_i renwei Lisi_j zhidao Wangwu_k taoyan ziji_{i/j/k}

Zhangsan think Lisi know Wangwu dislike self

“Zhangsan thinks that Lisi knows that Wangwu dislikes him/himself.”

According to Cole (1991) and Tang (1989), short-distance reflexives must be bound in their local domains because they fail to undergo head movement (see Cole 1991 for the details). Essentially this claim is not incorrect. There are, however, expressions in Chinese, which do not conform to what Cole assumed for. More precisely, in Chinese a short-distance reflexive may not only be surprisingly free in its local domain but may also be free everywhere in the sentence. To see this, let's take a close look at the following examples from Lü (1945), Chao (1968), and Wang (1947), respectively.

(4) a. 另外那些你自己留著吧。

lingwai naxie **ni-ziji** liu-zhe ba
addition those yourself keep SA(Solicit Agreement)

“Why don’t you keep those yourself?” (Lü 1945: 94)

b. 他自己人摔下來了。

ta-ziji ren shuai-xialai le
himself person fall-off PFV (perfective aspect)

“It is person (i.e. bodily) fell off.” (Chao 1968: 646)

c. 他自己罵自己。

ta-ziji ma **ziji**
himself scold self

“He himself scolded himself.” (Wang 1947, 2nd vol: 25)

As can be seen from these examples, if short-distance reflexives are treated as the members of the category of anaphor (it is so according to Cole), it should be subject to binding condition A. Nevertheless, again, the sentences in (4) demonstrate an obvious violation of condition A. One might argue that the preceding pronoun may be considered as an independent unit. Thus, the reference relationship between the pronoun and anaphor can satisfy the binding theory. On the face of it, this explanation offers an answer for those sentences in (4). However, as was indicated by Tang (1989), the preceding pronoun can not be hypothesized as an independent pronoun in such phrasal forms as *wo-ziji* ‘myself,’ *ni-ziji* ‘yourself,’ and *ta-ziji* ‘himself,’ etc.; it should be treated instead as a prefix. In theory this is basically correct since if they were pronouns, due to its feature

specification of [-ana, +pro], they would be subject to binding condition B (i.e. a pronoun must be free in its local domain). The following sentences would then be incorrectly ruled out.

(5) a. 李四_i 很討厭他_i 自己_i 。

Lisi_i hen taoyan ta_i ziji

Lisi very dislike he self

“Lisi dislikes himself very much.”

b. [每個人]_i 都喜歡他_i 自己_i 。

meigeren_i dou xihuan ta_i ziji

everyone all like he self

“Everybody likes himself.”

A similar argument can be found in Bickerton (1987). He argues that in English the expression ‘he himself’ should be seen as a single component, since ‘he’ and ‘himself’ behave differently in its binding domain. Bickerton’s analysis can in effect account for Chinese short-distance reflexives in a way similar to the account given for English (though the latter does not have the same form as ‘he self’ in Chinese, essentially the nature is no different). Therefore, if Tang’s assumption were correct (i.e. the preceding pronoun is a prefix), the above sentences in (2) and (4) would present a problem for binding theory.

Tang (1989), on the other hand, in her study of reflexives in Chinese, makes a distinction between anaphoric constructions and intensifying constructions. According to her, an anaphoric *ziji* is in argument position, whereas an intensifying *ziji* is in non-argument position, as shown in her examples below, respectively.

(6) a. 李四覺得自己會贏。

Lisi juede [ziji hui ying]

Lisi think Ana will win

“Lisi thinks that himself will win.”

b. 李四覺得[e 自己會贏]。

Lisi juede [e ziji hui ying]

Lisi think e Int will win

“Lisi thinks that himself will win.”

ziji in (6a) is in argument position, so it is anaphoric; whereas since *ziji* in (6b) is in non-argument position, it is intensifying. Following Tang’s theory, *ziji* in matrix subject position can only be intensifying, thus there exists an argument position for its antecedent, since no matter whether *ziji* is anaphoric or intensifying, it must obey the binding condition A. The following examples (her (11)) show this assumption.

(7) 自己買菜。

ziji mai cai

*Ana/Int buy food

“(You) go to market by yourself.”

Although her study was primarily concerned with anaphoric reflexive, by adopting her assumption for intensifying *ziji*, we could assume that the following sentences (cited from Chao (1968: 643-645)) in (8) may be accounted for by proposing that they are in fact bound by pro.

(8) a. 自己作錯了事，不應該怪人。

ziji zuo-cuole shi, bu yinggai guai ren
 self do-wrong thing not should blame people

“When one has done something wrong oneself, one should not blame it on someone else.”

b. 自己有錢的時候，就應該用自己的錢。

ziji you qian de shihou, jiu yinggai yong **ziji** de qian
 self have money when then should use self 's money

“When one has money oneself, one should use one’s own money.”

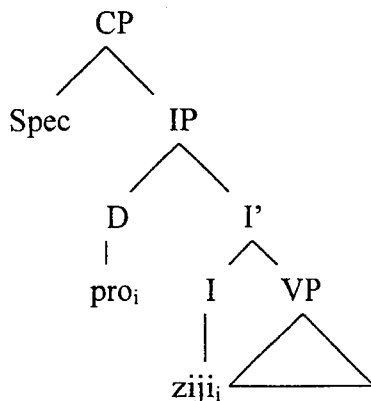
c. 騙人騙自己。

pian ren pian **ziji**
 fool people fool self

“In fooling others, one is fooling oneself.”

Take for example (8a). Its structure of the relevant part is assumed in (9).

(9)



zuo-cuole shi

In (9) the only qualified antecedent for the anaphor *ziji* is the D(eterminer) *pro* which does c-command *ziji* and (since they have the same index) therefore binds *ziji*. As a matter of fact, such hypothesis is not implausible since Chinese is one of the languages that allow a null subject in an expression; and, in theory, the position of *pro* can always be filled with a lexical category. Thus, for example, sentence (8a) could take the following form.

(10) 張三_i自己_i作錯了事，不應該怪人。

Zhangsan_i ziji_i zuo-cuole shi, bu yinggai guai ren

Zhangsan self do-wrong thing, not should blame people

“When Zhangsan_i has done something wrong himself_i, he should not blame it on someone else.”

Another possible solution provided by Huang (1984) suggests that such anaphor *ziji* may be discursively bound in the preceding sentence.

(11) Speaker A: 張三_i送誰來?

Zhangsan_i song shei lai

Zhangsan send who come

“Did Zhangsan send someone?”

Speaker B: 自己_i來了。

ziji_i lai le

self come PFV

“(Zhangsan)Himself came.”

According to Huang, *ziji* in (11) can refer to *Zhangsan* in the preceding sentence.

Huang's theory is potentially conceivable because Chinese, as Huang points out, are both discourse-oriented and topic-prominence languages whose properties ensure the possibility of the assumption here. The following example may be more persuadable.

(12) Speaker A: 張三 ; 盜用公款的事誰負責 ?

Zhangsan_i daoyong gongkuan de shi shei fuze

Zhangsan embezzle public fund 's thing who responsible

“Who should be responsible for Zhangsan's embezzlement?”

Speaker B: 我認爲他自己 ; 應該負責。

wo renwei ta-ziji_i yinggai fuze

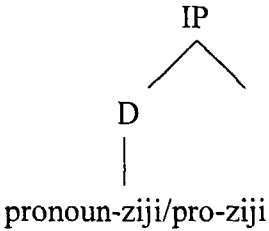
I think he-self should responsible

“I think that Zhangsan himself should be responsible for it.”

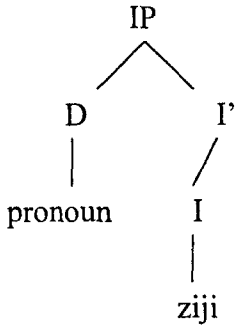
Yet comparing Huang's suggestion with Tang's, the latter seems to be more preferable in terms of the binding theory because 1) it is a plausible explanation to the phenomenon anyhow (although Tang did not discuss this topic in detail), 2) it does not violate the binding theory, and 3) the nature of the binding theory is in essence correct.

With respect to the problem shown in (2) and (4), on the other hand, if we follow Tang's suggestions that anaphoric *ziji* may contain a lexical/empty pronoun prefix in D-structure (i.e. either pronoun-*ziji* or pro-*ziji*), and intensifying *ziji* may be preceded by an independent pronoun, it would then be reasonable to assume that they possibly have the different structures as follows.

(13) a. Anaphoric reflexive



b. Intensifying reflexive



The following sentences given by Tang illustrate the idea.

(14) a. 張三_i 認為[他_{i/*j} 自己會去]

Zhangsan_i renwei [ta_{i/*j} -ziji hui qu]

Zhangsan think he Ana will go

“Zhangsan_i thought that himself_{i/*j} would go.”

b. 張三_i 認為[他_{ij} 自己會去]

Zhangsan_i renwei [ta_{ij} ziji hui qu]

Zhangsan think he Int will go

“Zhangsan_i thought that he himself_{ij} would go.”

In (14a) the anaphoric reflexive *ta-ziji* has the structure in (13a), so it has only one reading, whereas the intensifying reflexive in (14b) has the structure in (13b), thus it may have two readings. Although Tang does not show that *ziji* in (14b) is bound to the preceding pronoun *ta* (he), in theory this should be a possible hypothesis. If not, the sentence would incorrectly violate the binding condition A.

In light of this analysis, sentences in (4) could be explained only if such forms as *ta-ziji* and *ni-ziji*, etc. are intensifying reflexives rather than anaphoric reflexives.

However this does not imply that Tang's proposal solves the whole problem. As we shall see in (15) below, under the same analysis, there is no satisfactory answer for the following sentences.

(15) a. 我認爲這件事情[他自己很清楚]

wo renwei [zhejian shiqing ta-ziji hen qingchu]

I think this matter he Ana very clear

"I thought that himself knows the matter very well"

b. 我想[你自己心理明白]

wo xiang [ni-ziji xinli mingbai]

I think you Ana in mind understand

"I thought that yourself understand it in your own mind."

Sentences in (15) show that when the reflexive is anaphoric (as shown in (14) that a reflexive in such sentence may be either anaphoric or intensifying), it is not related to an antecedent anyhow in the sentence. Note that the above fact cannot be explained by Tang's assumption since we cannot simply limit such reflexives

in (15) to have an intensifying property only. Doing so would fail to explain the grammaticality of sentence (14a). Thus, no matter whether Tang's theory provides a plausible account for the problematic sentences in (4), the examples in (15) do present a problem for her as to how such reflexive constructions can be dealt with under her theory.

A similar case was found by Latridou (1986) in Modern Greek. He argues that the antecedents of such types of anaphors may be from the discourse context, yet they are not anaphoric in use (i.e. they function as emphatic pronouns or adjectives) so that the binding theory is not violated. However, it seems implausible for Chinese to argue with the same reason because the two languages behave quite differently.

One possible solution for this peculiar phenomenon in Chinese may be to assume, as Bouchard (1985) suggests, that they are in fact false anaphors (i.e. behaving more like pronouns than true anaphors), since they appear in sentences where they do not have referents. If this explanation can be accepted, however, how can we explain that the short-distance reflexive in (16a) below is true anaphor, whereas in (16b) it is false anaphor if both sentences have the same structure?

(16) a. 張三；覺得[他自己；應該再小心一點]

Zhangsan_i juede [ta-ziji_i yinggai zai xiaoxin yidian]

Zhangsan think himself should again careful a little

“Zhangsan_i thought that himself_i should be more careful.”

b. 我覺得[他自己應該再小心一點]

wo juede [ta-ziji yinggai zai xiaoxin yidian]

I think himself should again careful a little

“I thought that himself should be more careful.”

In such a case, it seems inconvincible to define that the short-distance reflexive in (16b) is not a true anaphor seemingly because it does not have a syntactic antecedent.

Summarizing this section, I have shown that in Chinese there exist sentence structures in which reflexives behave quite unusual in terms of the binding theory. For long-distance reflexive *ziji*, it may be free either in its local domain or in the entire sentence. Tang's theory that *ziji* is in non-argument position can somehow ensure the reflexive to be bound by pro when the D does not overtly present. On the other hand, we observe that Huang's assumption that a reflexive can sometimes discursively refer to someone in the preceding sentence gives a potential account for the coreferential relationship of the short-distance reflexives when there are no overt antecedents in the sentence. However, the sentences in (2) still remain unresolved since none of the approaches discussed in this section could possibly offer an account for it. We will return to these sentences in the third section.

2. C-command or not c-command

2.1. Introduction

In this section I will present data showing that in some situations the c-command condition seems to play no role for Chinese reflexives. We will also see how seemingly analogous non-c-commanding problems have been dealt with, and why the solutions cannot provide a satisfactory answer to the problem I present in this section.

2.2. Some Non-c-commanding Antecedents of Chinese Reflexives

Reflexive anaphors are known to require c-commanding antecedents, nevertheless sometimes they can be anteceded by non-c-commanding NPs. As Huang and Tang (1988) point out, in Chinese it is possible for a non-c-commanding NP to antecede *ziji* if it is a sub-commander or an experiencer, as shown in (17)..

(17) a. 自己_i的親人失蹤的消息使李四_i很難過。

[*ziji_i de qinren shizong de xiaoxi*]shi *Lisi_i hen nanguo.*
self POSS relative missing POSS news make Lisi very sad

“The news that his own relatives were missing made Lisi sad.”

b. 張三_i的壞脾氣害了自己_i。

[*Zhangsan_i de huai piqi*] *j hai-le ziji_{i/*j}.*
Zhangsan POSS bad temper hurt-ASP self

“Zhangsan’s bad temper hurt himself.”

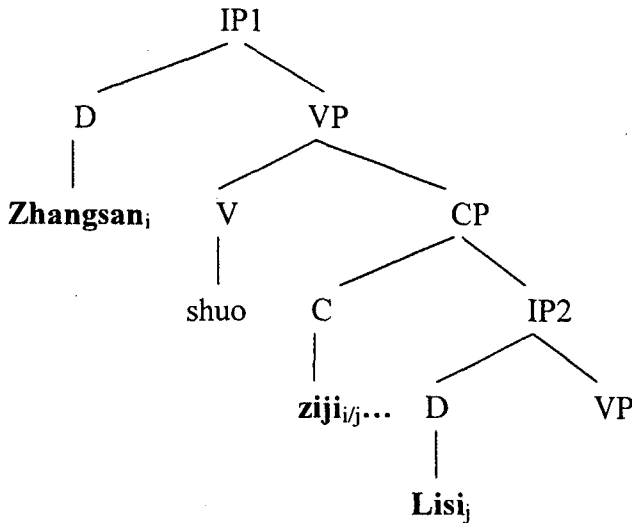
In (17a) *ziji*’s antecedent *Lisi* is an experiencer, whereas *ziji*’s binder *Zhangsan* in (17b) is a sub-commander. In relation to c-command condition, however, *ziji*’s binding problem can be much more severe. In addition to experiencers and sub-commanders, there in fact exist two more different types of non-c-commanding situations: when the antecedent is in possessive position of a raising NP and when the antecedent is in object position. Examples (18-19) exhibit these two types of non-c-commanding antecedents, respectively.

(18) 張三_i說自己_{i/j}的兒子李四_j竟然不要。

Zhangsan_i shuo [ziji_{i/j} de erzi [Lisi_j jingran bu yiao]]

Zhangsan say self POSS son Lisi unexpectedly not want

“Zhangsan said that Lisi unexpectedly didn’t want his own son.”

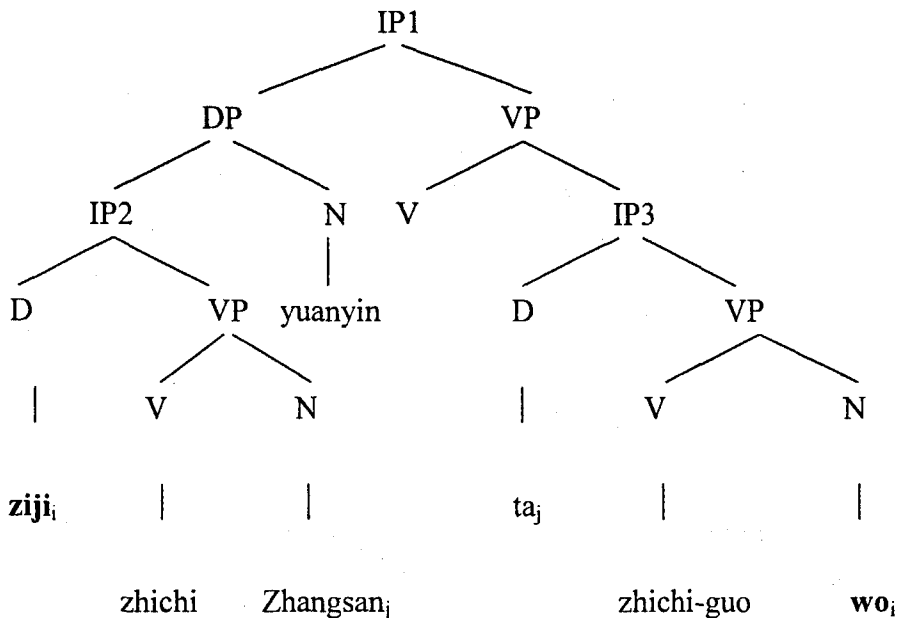


(19) 自己_{i/j}支持張三_j的原因是他以前也支持過我_i。

ziji_i zhichi Zhangsan_j de yuanyin shi ta_j yiqian ye zhichi-guo wo_i.

self support Zhangsan POSS reason is he before also support-ASP I

“The reason that I supported Zhangsan was that he too supported me before.”

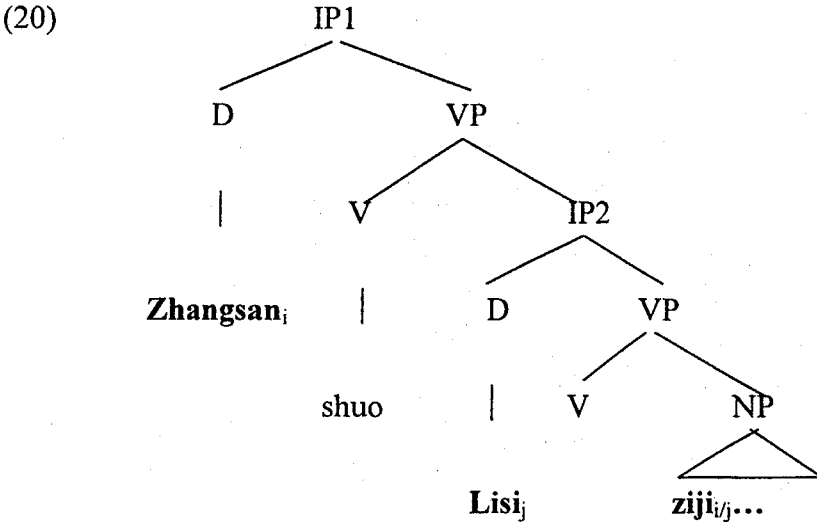


In (18-19) we clearly see that the reflexive *ziji*'s antecedent in each sentence fails to c-command *ziji*. Furthermore, as we can see, examples (18-19) demonstrate two entirely different types of non-c-commanding situations from (17). That would mean, if the observation in this paper is correct, Chinese reflexives would have at least 4 types of non-commanders, including experiencers and sub-commanders. This diversity argues against a solution involving parameterizing c-command into a variety of somewhat similar principles, say, c-command, sub-command, x-command, y-command, etc.²

Let us now look in some more detail at the structures of (18-19). In (18) we

² Cole and Sung (1990) have argued that parameterizing the notion of c-command into two different types: c-command and sub-command, is not a preferable approach because it is possible to account for the sub-commanding problem via a c-commanding explanation. Although, as we shall soon see, Cole and Sung's alternate proposal still fails to explain the non-c-commanding problems shown in this section, their objection of sub-commanding account is not implausible.

know that the NP *ziji de erzi* “self’s son” has been moved from its object position at D-Structure to be adjoined to IP2. In other words, the D-Structure of (18) would be roughly as follows.



The binding relations between *ziji* and *Zhangsan* and *Lisi* appear to be explainable since *Lisi* in (20) is in the c-commanding position at D-Structure. But this explanation would face a fundamental problem concerning binding theory. That is, binding conditions are known to apply at S-Structure or LF, never at D-Structure. So, structure (20) does not solve the binding problem. Notice further that, nor (20) implies that in this type of structure the embedded subject D can always be a non-c-commander. Consider Huang and Tang’s (1988) example in (21) and its D-Structure representation in (22).

(21) 張三_i說自己_{i/*j}的書李四_j最喜歡。

Zhangsan_i shuo [ziji_{i/*j} de shu [Lisi_j zui xihuan]]

Zhangsan say self ‘s book Lisi most like

(Lit.)”Zhangsan_i said that, self_{i/*j} book, Lisi_j likes most.”

(22) D-Structure

Zhangsan_i shuo [Lisi_j zui xihuan ziji_{i/j} de shu]

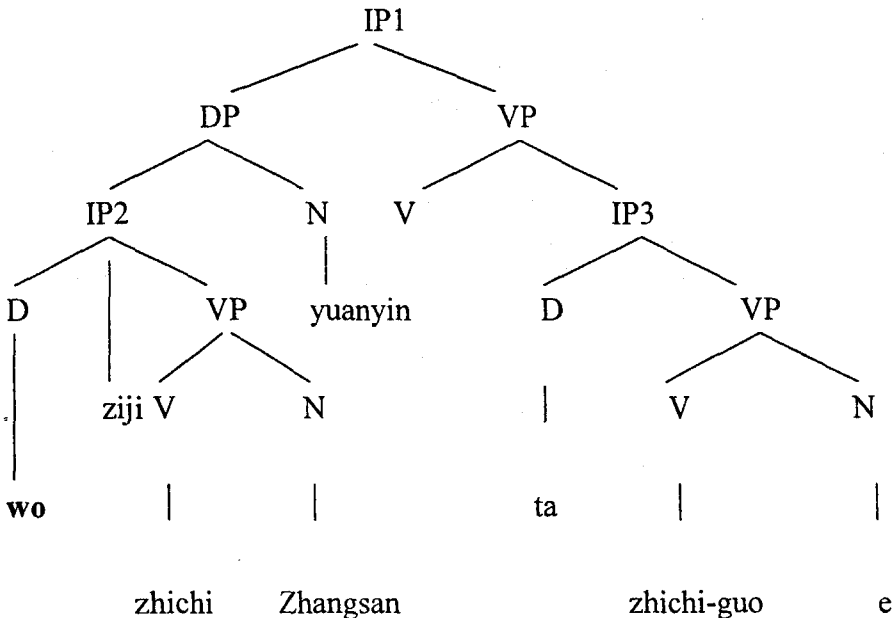
Zhangsan say Lisi most like self 's book

"Zhangsan_i said that Lisi_j likes his_{i/j} book most."

We see in (21-22) that the reflexive *ziji* cannot be bound by *Lisi* after raising. Since (18) and (21) have the same structure, whether the embedded subject D can serve as a non-c-commander in this type of construction is evidently determined by nonstructural factors.

Turn now to (19). One may argue that the non-c-commander *wo* 'I' has been moved in the syntax from the matrix subject position to the embedded object position. Thus, its D-Structure may look like (23).

(23)



Structure (23) is very arguable, and it involves the issue whether the reflexive *ziji* can be a subject.

Summarizing, we have seen that Chinese reflexives permit several types of non-commanders, which seems to suggest that the c-command requirement may not be very important in a language like Chinese. In the next discussion, I shall propose an account relating to the binding problems revealed in the previous discussions.

3. A possible explanation: *ziji* as a pronoun at D-Structure and S-Structure

In this section I will attempt to explain why some Chinese reflexives are allowed to be free from binding and why they can be immune from c-command condition. Recall that sentences in (2) remain unexplained in terms of Tang's and Huang's theories, let alone the binding theory of Chomsky. For the purpose of convenience, the sentences are repeated below in (24).

(24) a. 自己_i支持張三_j的原因是 他_j以前也支持過我_i。

ziji_i zhichi Zhangsan_j de yuanyin shi ta_j yiqian ye zhichi-guo wo_i.

self support Zhangsan POSS reason is he before also support-ASP I

“The reason that I supported Zhangsan was that he too supported me before.”

b. 張三_j曾是自己_i的救命恩人。

Zhangsan_j cengshi ziji_i de jiuming enren

Zhangsan once self 's save life benefactor

“Zhangsan was my benefactor for he had saved my life.”

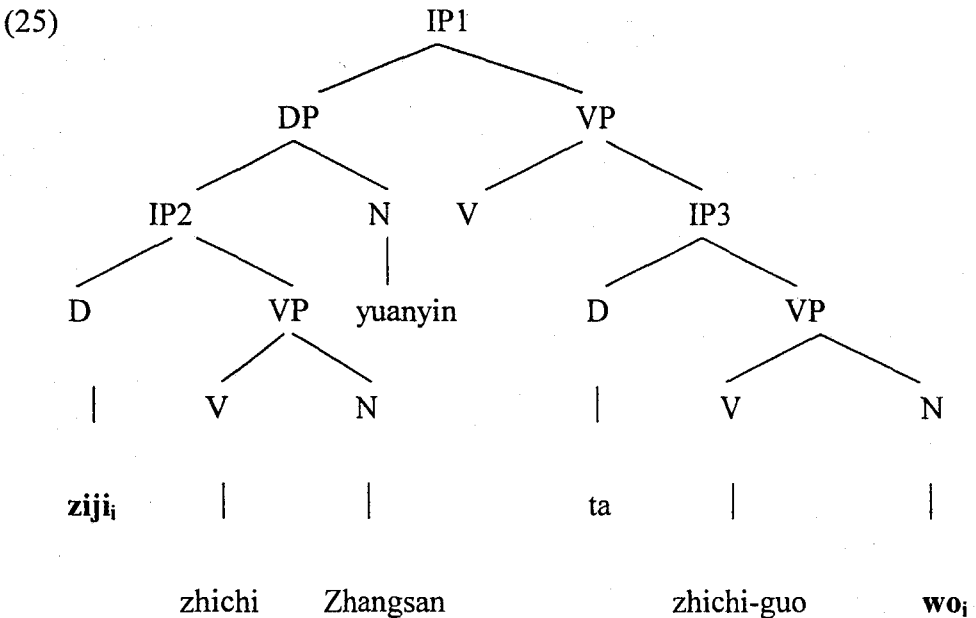
c. 張三_i 不滿李四_j 在背後毀謗自己_{i/*j}。

Zhangsan_i buman Lisi_j zai behou huibang ziji_{i/*j}

Zhangsan resent Lisi at back slander self

“Zhangsan resented Lisi’s slandering him behind his back.”

In (24a), *ziji* clearly refers to *wo* (I); yet *wo* is not only outside its local domain, most surprisingly, it is in a non-c-commanding position. Structure (25) makes this picture clear.



In (24b), the only qualified antecedent for the reflexive *ziji* is the matrix subject *Zhangsan* and this time it is in an exact c-commanding position. The problem is, however, that *ziji* semantically cannot refer to *Zhangsan* as one cannot be one’s own life-saving benefactor. The reflexive *ziji* here in (24b) must refer to someone outside the sentence: the speaker rather than someone in the preceding sentence.

In (24c), there are two candidates for the reflexive *ziji* to refer to, one is *Zhangsan* and the other is *Lisi*. In most of the cases, *ziji* is always coindexed with the two antecedents in a structure like (24c). (26) below is an example.

(26) 張三_i 認為李四_j 喜歡自己_{ij}。

Zhangsan_i renwei Lisi_j xihuan ziji_{ij}

Zhangsan think Lisi like self

“Zhangsan thought that Lisi liked him/himself.”

Nevertheless, here *ziji* in (24c) is coindexed with the matrix subject *Zhangsan* only, which means that the coreference relationship leaves out the closest subject *Lisi*, the most possible antecedent for the reflexive in the sentence. Again, since in semantics or in the normal sense of language use, one does not resent oneself, *Lisi* is therefore left out. Apparently the coreference relationship in the sentences that mentioned above involves non-structural consideration.

Still, how could we possibly give a syntactic account for the problems discussed above? One possibility this paper would like to offer is to assume that *ziji*'s underlying form may be a pronoun rather. The explanation that this paper proposes is that when we unconsciously know that a pronoun used in a statement may make the statement ambiguous in meaning interpretation, in its transformational cycles the pronoun will then underlyingly switch to the form of long-distance reflexive to avoid being uncertain in semantic reading. Wangli (1978: 38) points out this possibility:

(27) 有時候，爲了避免含糊起見，用「自己」爲第一個第三人稱，留著「他」字爲第二或第三個第三人稱，所謂第一個第三人稱，就是在本句裏第一個被提及的人。(quoted from Wangli 1978: 38)

“Sometimes in order not to become ambiguous, we use *ziji* instead of the

pronoun *ta* (he) as the first third person (i.e. the first person mentioned in a sentence). The pronoun *ta* is used as the second or the third person.”

The following two sentences in (28) cited from Wangli (1978: 39) are some of his examples.

- (28) a. 那黛玉聽見賈政叫了寶玉去了一日不回來，心中也替他憂慮。至晚飯後，聞得寶玉來了，心裏要找他問問是怎麼樣了。一步步行來，見寶釵進寶玉的園內去了，自己也隨後走了來。（「自己」指黛玉，「他」指寶玉。）

“Daiyu worried about Baoyu’s leaving as she had heard that Jiazheng asked Baoyu to go out with him. After dinner, Daiyu was told that Baoyu had come back, so she wanted to ask what was this all about. As she was walking to see Baoyu, she had seen that Baochai was entering Baoyu’s garden. She followed behind. (*ziji* here refers to Daiyu, whereas *ta* refers to Baoyu.)”

- b. 薛蟠見妹子哭了，便知自己冒撞，便賭氣走到自己屋裏安歇。（這裡「自己」若說成「他」，就會令人誤會是寶釵）

“When Xuepan found her crying, he knew that he was too careless. So, he intentionally walked back to his house to take a rest.”

Wangli’s analysis here motivates a realm of possibility that potentially the form *ziji* could be a pronoun if its appearance will not provide another reading. Therefore, in theory the two sentences in (28) should become ambiguous if *ziji* is replaced by the pronoun *ta*. And this is indeed the case in (28). (29) shows what would become if we replace *ziji* with the pronoun *ta*.

(29) a. 那黛玉聽見賈政叫了寶玉去了一日不回來，心中也替他憂慮。至晚飯後，聞得寶玉來了，心裏要找他問問是怎麼樣了。一步步行來，見寶釵進寶玉的園內去了，「他」也隨後走了來。

b. 薛蟠見妹子哭了，便知「他」冒撞，便賭氣走到自己屋裏安歇。

The pronoun *ta* in (29) may have more than one reading making each sentence incomprehensible. The reflexive *ziji* is thus used to replace the pronoun. Seeing this way, if we are on the right track, the previous discussed examples should all come towards the same conclusion. To see the comparison, all the relevant sentences mentioned in the previous discussions will be repeated with its pronoun counterpart. (30) a.他自己罵自己。

ta-ziji ma ziji

himself scold self

“He himself scolded himself.” (Wang 1947, 2nd vol: 25)

b.他自己罵他。

ta-ziji ma ta

himself scold him

“He himself scolded him.” (Wang 1947, 2nd vol: 25)

(31) a. 李四覺得自己會贏。

Lisi juede [ziji hui ying]

Lisi think Ana will win

“Lisi thinks that himself will win.”

b. 李四覺得他會贏。

Lisi juede [ta hui ying]

Lisi think he will win

“Lisi thinks that he will win.”

(32) a. 自己作錯了事，不應該怪人。

ziji zuo-cuole shi, bu yinggai guai ren

self do-wrong thing not should blame people

“When one has done something wrong oneself, one should not blame it on someone else.”

b. 他作錯了事，不應該怪人。

ta zuo-cuole shi, bu yinggai guai ren

he do-wrong thing not should blame people

“When he has done something wrong himself, he should not blame it on someone else.”

(33) a. 自己有錢的時候，就應該用自己的錢。

ziji you qian de shihou, jiu yinggai yong ziji de qian

self have money when then should use self 's money

“When one has money oneself, one should use one’s own money.”

b. 他有錢的時候，就應該用他的錢。

ta you qian de shihou, jiu yinggai yong ta de qian
he have money when then should use he 's money

“When he has money himself, he should use his own money.”

(34) a. 騙人騙自己。

pian ren pian ziji
fool people fool self

“In fooling others, one is fooling oneself.”

b. 騙人騙他。

??pian ren pian ta
fool people fool him

“??In fooling others, one is fooling him.”

(35) a. Speaker A: 張三送誰來？

Zhangsan song shei lai
Zhangsan send who come

“Did Zhangsan send someone?”

Speaker B: 自己來了。

ziji lai le
self come PFV

“Himself came.”

b. Speaker A: 張三送誰來？

Zhangsan song shei lai

Zhangsan send who come

“Did Zhangsan send someone?”

Speaker B: 他來了。

ta lai le

self come PFV

“Himself came.”

(36) a. 自己_i的親人失蹤的消息使李四_i很難過。

[ziji_i de qinren shizong de xiaoxi] shi Lisi_i hen nanguo.

self POSS relative missing POSS news make Lisi very sad

“The news that his own relatives were missing made Lisi sad.”

b. 他_{ij}的親人失蹤的消息使李四_i很難過。

[ta_{ij} de qinren shizong de xiaoxi] shi Lisi_i hen nanguo.

he POSS relative missing POSS news make Lisi very sad

“The news that his own relatives were missing made Lisi sad.”

(37) a. 「張三_i的壞脾氣」_j害了自己_i。

[Zhangsan_i de huai piqi]_j hai-le ziji_{i/*j}.

Zhangsan POSS bad temper hurt-ASP self

“Zhangsan’s bad temper hurt himself.”

b. 「張三_i的壞脾氣」_j害了他_{i/*j/k}。

[Zhangsan_i de huai piqi]_j hai-le ta_{i/*j/k}.

Zhangsan POSS bad temper hurt-ASP self

“Zhangsan’s bad temper hurt himself.”

(38) a. 張三_i說自己_{i/j}的兒子李四_j竟然不要。

Zhangsan_i shuo [ziji_{i/j} de erzi [Lisi_j jingran bu yiao]]

Zhangsan say self POSS son Lisi unexpectedly not want

“Zhangsan said that Lisi unexpectedly didn’t want his own son.”

b. 張三_i說他_{i/*j/k}的兒子李四_j竟然不要。

Zhangsan_i shuo [ta_{i/*j/k} de erzi [Lisi_j jingran bu yiao]]

Zhangsan say he POSS son Lisi unexpectedly not want

“Zhangsan said that Lisi unexpectedly didn’t want his son.”

(39) a. 自己支持張三的原因是以前他也支持過我。

ziji_i zhichi Zhangsan_j de yuanyin shi ta_j yiqian ye zhichi-guo wo_i.

self support Zhangsan POSS reason is he before also support-ASP I

“The reason that I supported Zhangsan was that he too supported me before.”

b. 他支持張三的原因是以前他也支持過我。

ta_i zhichi Zhangsan_j de yuanyin shi ta_j yiqian ye zhichi-guo wo_i.

I support Zhangsan POSS reason is he before also support-ASP I

“The reason that I supported Zhangsan was that he too supported me before.”

(40) a. 張三_j 曾是自己_i 的救命恩人。

Zhangsan_j cengshi ziji_i de jiuming enren

Zhangsan once self 's save life benefactor

“Zhangsan was my benefactor for he had saved my life.”

b. 張三曾是他的救命恩人。

Zhangsan cengshi wo de jiuming enren

Zhangsan once my 's save life benefactor

“Zhangsan was my benefactor for he had saved my life.”

(41) a. 張三_i 不滿李四_j 在背後毀謗自己_{i/*j}。

Zhangsan_i buman Lisi_j zai beihou huibang ziji_{i/*j}

Zhangsan resent Lisi at back slander self

“Zhangsan resented Lisi’s slandering him behind his back.”

b. 張三_i 不滿李四_j 在背後毀謗他_{i/*j/k}。

Zhangsan_i buman Lisi_j zai beihou huibang ta_{i/*j/k}

Zhangsan resent Lisi at back slander him

“Zhangsan resented Lisi’s slandering him behind his back.”

As expected, when we substitute the pronoun *ta* for the reflexive *ziji*, the reading in each sentence (b) becomes uncertain. All these examples seem to entail a possible assumption: there may be two types of *ziji* in Chinese. More clearly, we may propose the following two types of long-distance reflexive *ziji*.

(42) Type 1: *ziji* has the same underlying form at Logic Form if *ziji* is in an object position of a simple sentence.

Type 2: *ziji* is a pronoun at Logic Form if *ziji* appears in a position not mentioned in Type 1.

The reason for the hypothesis of Type 1 is obvious. There is no possibility that *ziji* in such a position is a pronoun at LF (i.e. LF is a level responsible for the meaning in derivation), since in a grammatical simple sentence only the subject can bind *ziji* in object position. Therefore, no semantic ambiguity will be involved in this type of structure. The replacement of *ziji* with the pronoun *ta* would make the sentence become awkward. More importantly, there should not exist such a replacement. Examples in (30), repeated as (43) below, can make this explanation clear.

(43) a. 他自己罵自己。

ta-ziji ma **ziji**

“He himself scolded himself.” (Wang 1947, 2nd vol: 25)

b. 他自己罵他。

ta-ziji ma **ta**

“He himself scolded him.” (Wang 1947, 2nd vol: 25)

Therefore, (43b) should not be seen as the Logical Form of (43a).

On the other hand, Type 2 may involve a replacement mechanism at LF. The following diagrams can illustrate how this transformation works. Take (31) for example, repeated below as (44).

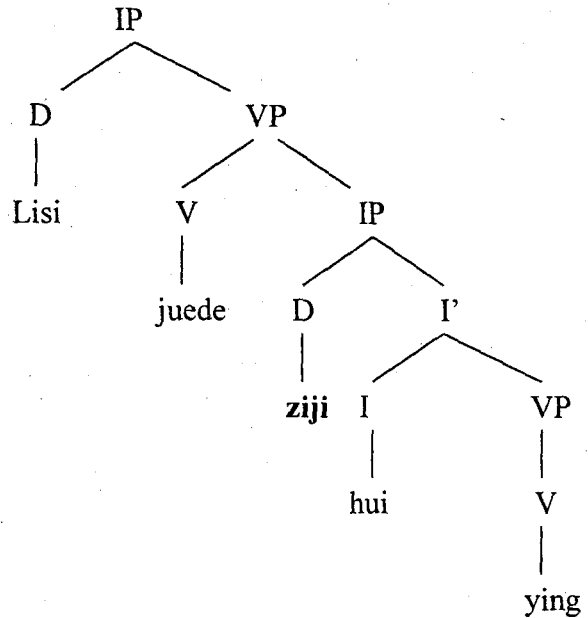
(44) a. 李四覺得自己會贏。

Lisi juede [ziji hui ying]

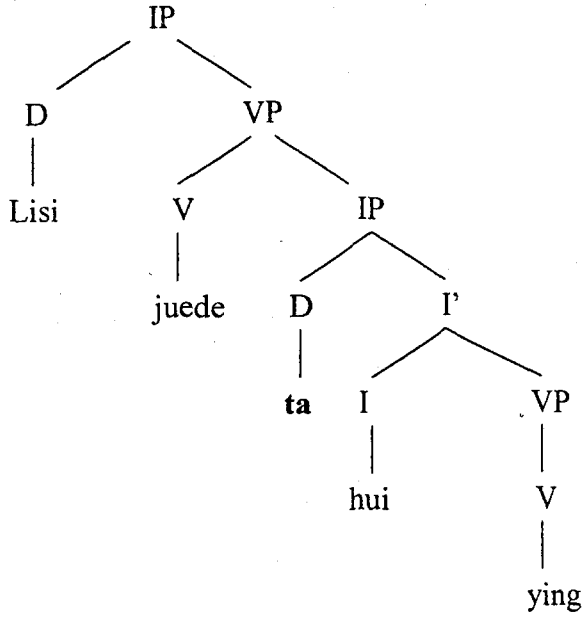
b. 李四覺得他會贏。

Lisi juede [ta hui ying]

D-Structure



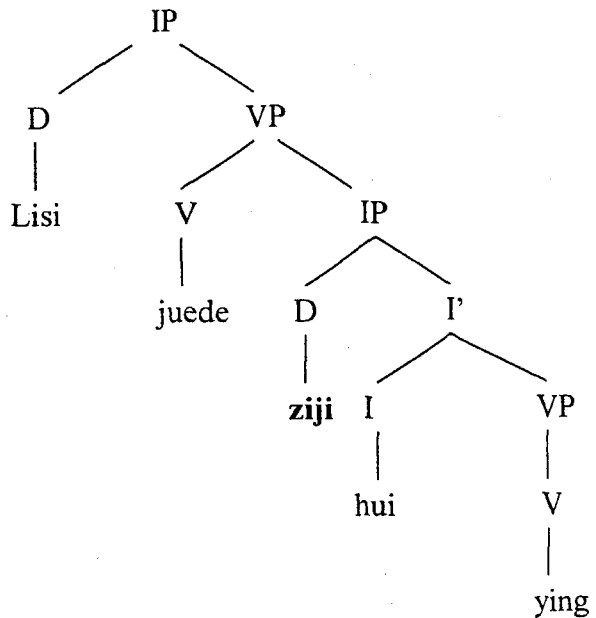
S-Structure



Replacement of *ta* with the pronoun *ziji*



Logical Form



Therefore, since binding theory applied at S-Structure in Chinese, based on our assumption, the previous pointed out binding and c-commanding problems will then no longer exist. Let's now review two problematic sentences mentioned above: one repeated in (45) involves non-binding problem and the other restated in (46) engages the non-c-commanding situation.

(45) a. 張三_i 不滿李四_j 在背後毀謗自己_{i/*j}。

Zhangsan_i buman Lisi_j zai beihou huibang ziji_{i/*j}

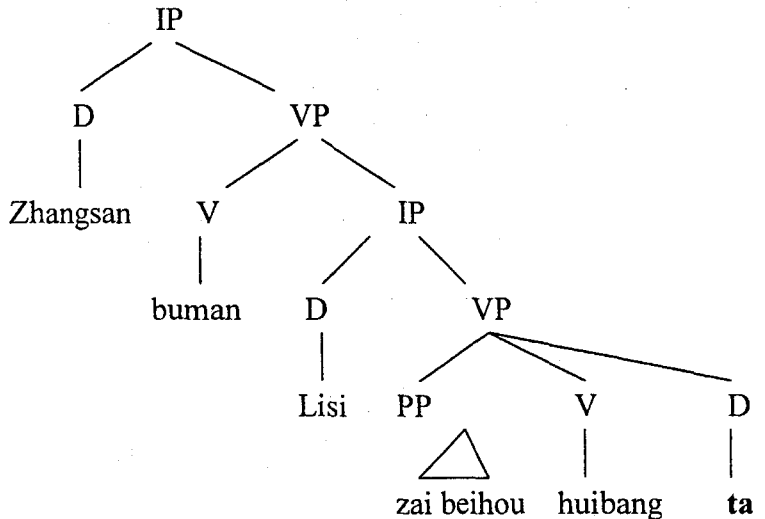
“Zhangsan resented Lisi’s slandering him behind his back.”

b. 張三_i 不滿李四_j 在背後毀謗他_{i/*j/k}。

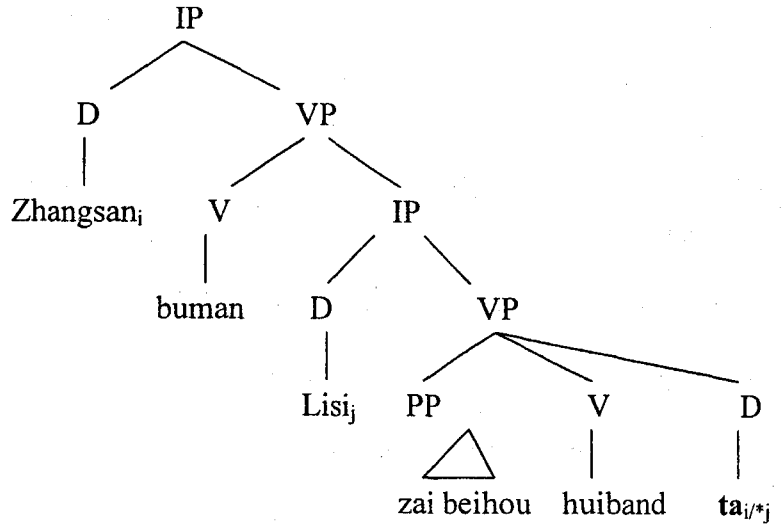
Zhangsan_i buman Lisi_j zai beihou huibang ta_{i/*j/k}

“Zhangsan resented Lisi’s slandering him behind his back.”

D-Structure



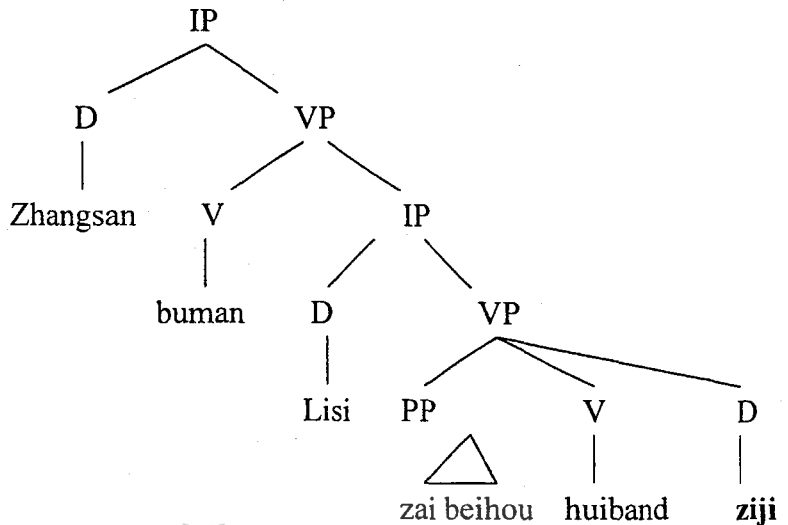
S-Structure



Replacement of *ta* with the pronoun *ziji*



Logical Form



One advantage this proposal provides is that at S-Structure when binding theory applies, we amazingly find that the sentence's binding relation is perfectly described in terms of the pronoun *ta* in the bindee position. This is because the pronoun must be free from coindexing with the closest subject (i.e. *Lisi*) in accordance with binding condition B. When the operation reaches at LF to specify what the sentence means, the binding will no longer affect the sentence interpretation.

Turn now to another sentence. Repeated in (46) below.

(46) a. 自己支持張三的原因是他以前也支持過我。

ziji_i zhichi Zhangsan_j de yuanyin shi ta_j yiqian ye zhichi-guo wo_i.

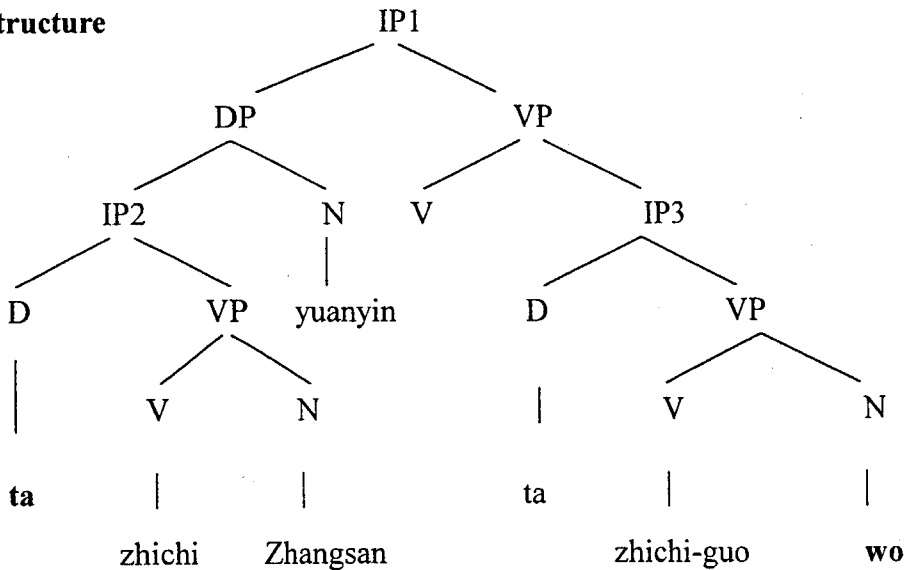
“The reason that I supported Zhangsan was that he too supported me before.”

b. 他支持張三的原因是他以前也支持過我。

ta_i zhichi Zhangsan_j de yuanyin shi ta_j yiqian ye zhichi-guo wo_i.

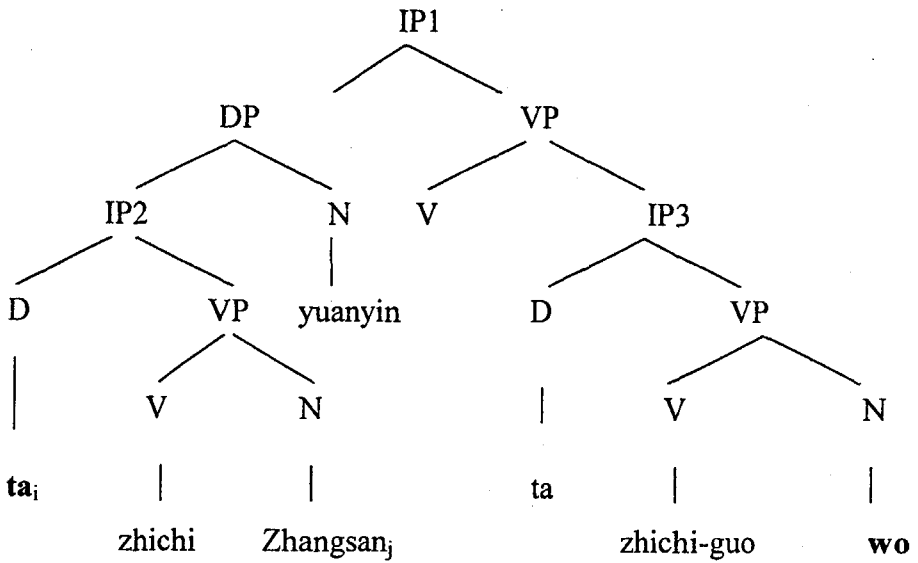
“The reason that I supported Zhangsan was that he too supported me before.”

D-Structure





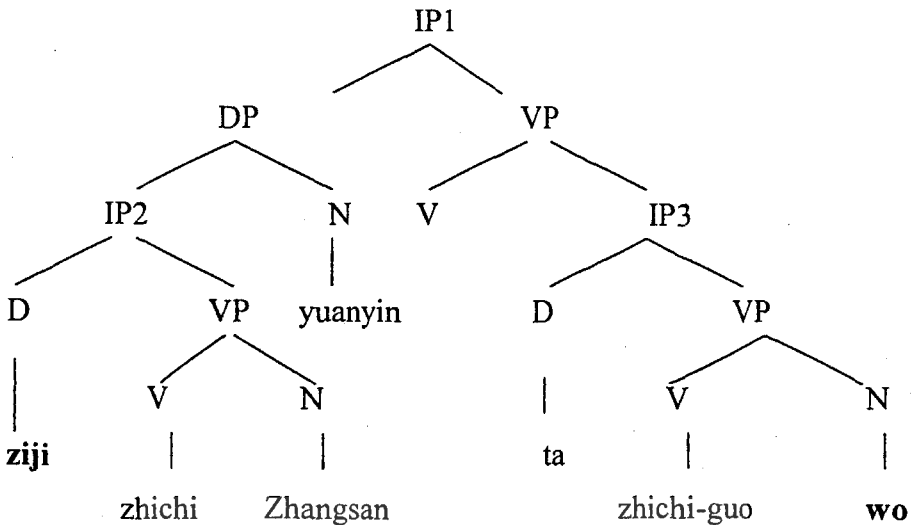
S-Structure



Replacement of *ta* with the pronoun *ziji*



Logical Form



Clearly, here at S-Structure we see that the matrix subject pronoun *ta* is free in its local domain, therefore no c-commanding condition is imposed in the derivation at this level.

4. Conclusion

In this paper we have first observed certain unusual binding phenomena concerning Chinese short distance reflexive pronoun+*ziji* and long distance reflexive *ziji*. We have also seen some possible explanations for their coreference interpretations, including Tang (1989), Cole (1990), and Huang (1984), etc. However, we conclude that none of the approaches provided by them can provide an adequate account for the binding problems mentioned in this paper. We further observe some non-c-commanding sentence structures involving particularly the long distance reflexive *ziji*. Our observation shows that Chinese reflexives permit several types of non-c-commanders, including what Huang and Tang point out, i.e., the sub-commander and experiencer. All these seem to suggest that the c-command requirement may be not very important in Chinese. To solve the problems, this paper proposes an assumption that, by adopting Wangli's(1978) explanation about why *ziji* is used in some expressions, first, we suggest that there are two types of *ziji* in Chinese. Type 1 is a true *ziji*, which remains the reflexive form throughout the entire derivation. Type 2 in essence is not assumed to be a true reflexive. It is a pronoun *ta* at the levels of D-Structure and S-Structure. Via a *ziji* replacement mechanism at the level between S-Structure and Logical Form, its reflexive form is therefore present in the sentence's LF representation, a level that is mainly responsible for the sentence's meaning interpretation, thereby immunizing from the application of binding theory and its accompanying c-commanding requirement. That is, for those non-problematic sentences involving the Type 2, reflexive form will be simply subject to binding condition B at S-Structure.

References

- Bickerton, D. (1987) "He Himself: Anaphor, Pronoun, or...?" *Linguistic Inquiry* 18, 345-348.
- Bouchard, D. (1985) "The Binding Theory and the Notion of Accessible SUBJECT," *Linguistic Inquiry* 16, 117-133.
- Chao, Yuen-ren (1968) A Grammar of Spoken Chinese. Berkeley and Los Angeles: University of California Press.
- Chomsky, N. (1996) *The Minimalist Program*. The MIT Press, Cambridge, Massachusetts London, England.
- Cole, P., Hermon, G., and Sung Li-May (1990) "Principles and Parameters of Long-Distance Reflexives," *Linguistic Inquiry* 21, 1-22.
- Huang, C.-T.J. (1984) "On the Distribution and Reference of Empty Pronouns," *Linguistic Inquiry* 15, 531-574.
- Latridou, S. (1986) "An Anaphor Not Bound in its Governing Category," *Linguistic Inquiry* 17, 766-772.
- Lü, Shuxiang (1945) Chung Kuo Wen Fa Yao Lueh (The Outline of Chinese Grammar), Shangwu Yinshuguan.
- Tang, C.-C.J. (1989) "Chinese Reflexives," *Natural Language and Linguistic Theory* 7, 93-121.
- Wang, Li (1947) *Zhongguo Xiandai Yufa* (Modern Chinese Grammar), Shanghai 2nd vol.
- Wang, Li (1978) *Zhongguo Yufa Lilun* (Modern Chinese Grammatical Theory), Landeng 2nd vol.