

Two Types of Pre-Verbal Anaphors in Chinese¹

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Abstract

It has been demonstrated in this article that the Chinese reflexive ziji 'self' in a pre-verbal position can be either an adverbial or a subject. Adverbial and subject anaphors are subject to different types of locality conditions. Adverbial reflexives are local because adverbials in general are local, while the fact that subject anaphors are local is an effect of the relevant Binding condition. Subject and adverbial anaphors are not distinguished from each other in Chinese as obviously as they are in English. An adverb diagnostics has been developed to differentiate the real subject anaphors from adverbial ones.

Keywords

Anaphor, locality condition, subject, adverbial, Chinese

1. Long-Distance and Local Anaphors in Chinese

It has been widely observed that there is a sharp contrast between the Chinese bare reflexive *ziji* and compound reflexives (i.e., pronoun + *ziji*) such as *taziji* 'himself/herself' and *womenziji* 'ourselves' in that the former, but not the latter, may permit long-distance antecedents, especially when those anaphors occur in the post-verbal (object) position. The following pair of sentences serves to illustrate this contrast (see Huang and Tang (1988), and Cole, Hermon and Sung (1990) among many others).

- (1) Zhangsan_i renwei Lisi_j zeguai-le ziji_{i/j}.
Zhangsan think Lisi blame-Asp self

¹ For valuable enlightening comments and suggestions, I wish to thank the two anonymous referees.

‘Zhangsan thinks that Lisi blamed himself.’

- (2) Zhangsan_i renwei Lisi_j zeguai-le ta-ziji_{*i/j}.

Zhangsan think Lisi blame-Asp him-self

‘Zhangsan thinks that Lisi blamed himself.’

Generally speaking, this is a correct observation. However, we notice that the situation may be obscured and therefore much more complex when we take into consideration the phenomena exhibited in the following sentences where the reflexives occur pre-verbally.

- (3) Zhangsan_i yiwei Lisi_j zhidao ziji_{i/j} neng zuo na jian shi.

Zhangsan thought Lisi know self able do that CL job

‘*Zhangsan thought that Lisi knew that himself was able to do that job.’

- (4) Zhangsan_i yiwei Lisi_j yinggai ziji_{*i/j} neng zuo na jian shi.

Zhangsan thought Lisi should self able do that CL job

‘Zhangsan thought that Lisi should be able to do that job himself.’

- (5) Zhangsan_i xiangxin Lisi_j zhidao ziji_{i/j} xihuan kaiche.

Zhangsan believe Lisi know self like driving

‘*Zhangsan believes that Lisi knows that himself likes driving.’

- (6) Zhangsan_i xiangxin Lisi_j jingchang ziji_{*i/j} kaiche shangxue.

Zhangsan believe Lisi often self driving go to school

‘Zhangsan believes that Lisi often goes to school by driving himself.’

The existence of these sentences seems to suggest that there is something else, in addition to the observed contrast between compound and bare reflexives, at work that applies only to the pre-verbal reflexives and not to the post-verbal ones.

2. Local Anaphors in Chinese

We note first that the reflexive in some sentences above, particularly those which don't allow long-distance binding as in (4) and (6), are not the (argument) subject in the first place. Rather, it is functionally an (adjunct) adverbial. If so, there are in fact two types of anaphors, subject and adverbial anaphors, which both occur pre-verbally in languages like Chinese. It is worth noting here that adverbial anaphors are not peculiar to Chinese. In English, for example, reflexives may also take some sort of non-

argument position which is very similar to the Chinese phenomenon that we are now considering. The reflexive *himself* in the following English sentences, as noted in Bickerton (1987),² is clearly not an argument. Semantics of this type of reflexives, which can be roughly characterized as ‘NP_i, and no one but NP_i’ is also different from the semantics of argument reflexives.

- (7) a. John himself did it.
b. John did it himself.
- (8) a. John gave it to Mary himself.
b. John himself gave it to Mary.

With different syntactic natures, subject and adverbial anaphors are expected to behave differently, and therefore should be treated differently in both Chinese and English. Note that it is not a problem to tell whether a reflexive in a given context is used as a subject or as an adverbial in English, since the language has some form of inflectional morphology and adverbials (but not subjects) can be placed either before or after the verb. In Chinese, on the other hand, one may be easily confused as to whether a certain reflexive is the subject or an adverbial in a clause, as these two types of constituents both occur pre-verbally in the language, and the language allows null subjects and has little morphology. But such a distinction obviously has to be drawn before any appropriate characterization of the properties of subject anaphors can be achieved.

3. Distinction between Two Types of Anaphors

To distinguish these two types of pre-verbal anaphors in Chinese, we note that although the relative linear ordering of adverbs and adverbial expressions is generally quite free in the language, Chinese has a class of adverbs whose position is relatively fixed. They can occur only after the subject NP but not before it, and these adverbs must precede all other adverbs and adverbial expressions used in the sentence. *Yinggai* ‘should’ and *jingchang* ‘often’, among many others, are two such adverbs. Thus, sentences a in (9) - (12) below, which satisfy this constraint, are acceptable, while sentences b, which are in violation of it, are not.

- (9) a. Ni yinggai mai yi dong fangzi.
you should buy one CL house
‘You should buy a house.’
b. *Yinggai ni mai yi dong fangzi.

² *He himself* was treated as a single constituent in Bickerton (1987). But since they are separable, each occupying a position, we would treat them separately. *Himself* is an adverbial reflexive, while *he* is an argument.

- should you buy one CL house
- (10) a. Zhangsan jingchang kaiche shangxue.
Zhangsan often drive go to school
'Zhangsan often goes to school by driving.'
- b. *Jingchang Zhangsan kaiche shangxue.
often Zhangsan drive go to school
- (11) a. Wo yinggai manmande du.
I should slowly read
'I should read slowly.'
- b. *Wo manmande yinggai du.
I slowly should read
- (12) a. Zhangsan jingchang zai jia xie wenzhang.
Zhangsan often at home write paper
'Zhangsan often writes papers at home.'
- b. *Zhangsan zai jia jingchang xie wenzhang
Zhangsan at home often write paper

Note that this constraint on word-ordering, no matter how the constraint itself can be explained, can be used as a diagnostic to distinguish subject and adverbial anaphors for our purpose. If an anaphor occurs before such adverbs as in (13) and (14) below, the anaphor must be a subject of the clause since adverbs of that kind can never follow a subject NP. Following the same line of reasoning, if an anaphor is placed after such adverbs as in (15) and (16), it should best be treated as an adverbial.

- (13) Zhangsan_i renwei ziji_i yinggai qu nali.
Zhangsan think self should go there
'*Zhangsan thinks that himself should go over there.'
- (14) Zhangsan_i shuo ziji_i jingchang kaiche.
Zhangsan say self often drive
'*Zhangsan says that himself often drives.'
- (15) Zhangsan_i renwei Lisi_j yinggai ziji_i qu nali.
Zhangsan think Lisi should self go there
'Zhangsan thinks Lisi should go over there himself.'
- (16) Zhangsan_i shuo EC_j jingchang ziji_i kaiche.
Zhangsan say often self drive
'Zhangsan says that (he) often drives by himself.'

As in the previous examples, the adverbial *ziji* in (15) and (26) is strictly local in nature. It can co-refer only with the closest subject (i.e., *Lisi* in (15) and an empty pronoun in (16)) but not with the subject of the matrix clause (i.e., *Zhangsan* in both (15) and (16)). In contrast, the subject *ziji* (17) and (18) below can be long-distance. It may co-refer either with the closest subject *Zhangsan* or with the matrix subject *Lisi*, bypassing the closest subject.

(17) *Lisi_i shuo Zhangsan_j renwei ziji_{i/j} yinggai qu nali.*

Lisi say Zhangsan think self should go there

‘*Lisi says that Zhangsan thinks that himself should go over there.’

(18) *Lisi_i bu xiangxin Zhangsan_j shuo ziji_{i/j} jingchang kaiche.*

Lisi not believe Zhangsan say self often drive

‘*Lisi does not believe that Zhangsan says that himself often drives.’

Note that if we assume that the long-distance property of the Chinese reflexive in the real subject position can be derived along some form of LF-movement approach such as those suggested in Huang et al. (1988) and Cole et al (1990),³ the natural question that arises here is why the same anaphor (at least morphologically) behaves differently in different syntactic positions.

4. The Syntactic Nature of Local Anaphors in Chinese

We would point out that the local nature of adverbial anaphors is fundamentally different from that of non-adverbial anaphors. Conceptually, while non-adverbial anaphors as argument NPs with no inherent reference seek antecedents for their reference, and in this sense they are called ‘anaphoric,’ the adverbial anaphors essentially ‘emphasize’ the subject NPs, namely ‘NP_i, and no one but NP_i’ in the words of Bickerton (1987). Thus adverbial anaphors are ‘emphatic.’ Anaphoric anaphors are local in the sense of Binding Theory in that they require their antecedents on which their reference is dependent to be close to them, while emphatic anaphors are local in the sense that they emphasize only the closest subject NPs. Clearly the nature of locality of anaphors in the adverbial sense is not a peculiar property of adverbial anaphors, but rather that of adverbs and adverbial expressions in general.⁴

In addition to the contrast between the adverbial *ziji* and the non-adverbial *ziji* as discussed above, the following contrasts which may otherwise be puzzling also become more understandable on our general observation that an anaphor in Chinese may be an argument anaphor or an adverbial one, and that adverbial anaphors are ‘local’ because

³ Note that the LF-movement approach of Huang et al. (1988) and Cole et al. (1990) fails to account for the contrast exhibited here

⁴ Take a simple English sentence like *John says that Bill always goes to school early*. Note that the adverb *always* can be associated with the local subject *Bill* but not the ‘long-distance’ subject *John*, a kind of locality.

adverbials in general are local.

(A) The contrast between the Chinese reciprocal *huxiang* and the non-adverbial *ziji*

We observe that the Chinese reciprocal *huxiang*, unlike the bare reflexive *ziji* in non-adverbial usage is also ‘local’ as is the adverbial reflexive *ziji*.

(19) [Zhangsan he Lisi]_i zhidao tamen_j huxiang*_{i/j} aimu.

Zhangsan and Lisi know they each other love

‘Zhangsan and Lisi know that they love each other.’

(20) Laoshi-men_i shuo zhexie xuesheng_j jingchang huxiang*_{i/j}

teacher-pl say these students often each other

bangzhu.

help

‘The teachers say that these students help each other very often.’

We attribute the locality of the Chinese reciprocal to its placement in the adverbial position in the same sense as we do with adverbial *ziji*. So, the Chinese reciprocal is local because adverbials are all local.

(B) The contrast between the Chinese reciprocal *huxiang* and the English reciprocal *each other*

While the Chinese reciprocal *huxiang* can only be interpreted strictly locally, as illustrated in (19) and (20), the English reciprocal *each other*, as Lebeaux (1983) demonstrates, has some interesting properties that put it in contrast with its Chinese counterpart in some sense. Consider sentence (21) (= Lebeaux 20) below. It has two interpretations: one in which *John* and *Mary* both know the full content of the embedded proposition and a second in which each knows only his or her own feelings and not the other’s. We would like to interpret the sentence with the long-distance reading (or narrow scope reading in Lebeaux’s terms) as having a long-distance anaphor, *each other*.

(21) [John and Mary]_i knew that they_j liked each other_i.

a. John and Mary knew that [John liked Mary/Mary liked John]

b. John knew that John liked Mary

Mary knew that Mary liked John

[Interpretation: John and Mary each knew that self liked other.]

If this observation is correct, no matter what kind of explanation we can provide for it,⁵ there will be a clear contrast between the English *each other* and the Chinese reciprocal *huxiang*, since the Chinese equivalent of (21) can only have one of the two possible interpretations, namely the one which corresponds to (21a). For us, this contrast between Chinese and English reciprocals is no surprise. The Chinese reciprocal *huxiang* can only be interpreted locally because it occurs in the pre-verbal adverbial position (recall that the object NP always follows the verb in the language), and *each other* can in some sense be long-distantly interpreted because it occurs in a post-verbal argument position.

5. Conclusion

It has been widely observed that there is a sharp contrast between the Chinese bare reflexive *ziji* and compound reflexives (i.e., pronoun + *ziji*) such as *taziji* ‘himself/herself’ and *womenziji* ‘ourselves’ in that the former, but not the latter, may permit long-distance antecedents, especially when those anaphors occur in the post-verbal (object) position. Although this is a correct observation, it has to be pointed out that the reflexive in some types sentences don’t allow long-distance binding. It has been argued in article that those reflexives which don’t permit long-distance interpretation are not the (argument) subject in the first place, which is comparable to the English reflexive *himself* in such a sentence as *John gave it to Mary himself*. Rather, it is functionally an (adjunct) adverbial. If so, there are in fact two types of anaphors, subject and adverbial anaphors, which both occur pre-verbally in languages like Chinese. Adverbial and subject anaphors are subject to different types of locality conditions, the locality nature of adverbial anaphors is fundamentally different from that of non-adverbial anaphors. Adverbial reflexives are local because adverbials in general are local, while that subject anaphors are local is an effect of the relevant Binding condition. The Chinese language allows subject anaphors in the position where English excludes anaphors because the *Infl* in Chinese does not contain the element *Agr* (Xu (2003) among others). An adverb diagnostic has been developed to differentiate the real subject anaphors from adverbial ones.

Furthermore, some other contrasts which may otherwise be puzzling also become more understandable on our general observation that an anaphor in Chinese may be an argument anaphor or an adverbial one, and that adverbial anaphors are ‘local’ because adverbials in general are local: (A) The contrast between the Chinese reciprocal *huxiang* and the non-adverbial reflexive *ziji*; and (B) The contrast between the Chinese reciprocal *huxiang* and the English reciprocal *each other*.

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