Long-distance Reflexives and Mandarin Comparatives
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Synopsis: This paper addresses the debate regarding the derivation of Mandarin comparatives (see (1a); bi the comparative marker) by providing a new argument concerning the long distance reflexive ziji ‘self’.

In Reduction Analysis (henceforth, RA; Liu 1996, following Bresnan (1973); a.o.), an occurrence of the gradable predicate (in (1), gao ‘tall’) is elided at the surface (indicated by strikethrough) within the bi-constituent (see (1b)). In Direct Analysis (henceforth, DA; Lin 2009 (cf. Xiang 2005; Erlewine 2007)); in the spirit of Heim 1985 however, the size of the complement of bi is transparent at the surface and no ellipsis is involved in the derivation (see (1c)).

(1) a. Zhangsan bi Lisi gao
Zhangsan COMP Lisi tall
‘ZS is taller than LS.’

b. RA: ZSi [[PP bi [LS gao] [ti gao]]]
   (Liu 1996)
c. DA: Zhangsan [AP [DegP [Deg’ bi [DP LS]] gao]]
   (Lin 2009)

This paper claims that while RA provides a straightforward account for the data concerning the long distance reflexive ziji (see (2)), these previously unnoticed data pose a serious challenge to DA. (2a) shows that a sloppy reading is obtained in a comparative where the gradable predicate contains ziji ‘self’; (2b) shows that when (2a) is embedded, both a long-distance-reflexive (LDR) reading and a sloppy reading are available; (2c) shows that once the standard of comparison (i.e. the nominal preceded by bi) differs in person from the matrix subject and the target, the LDR-reading is unavailable.

(2) a. Zhangsan bi Lisi dui ziji hao Sloppy: ‘ZSi is better to himself, than LS is to himself.’
   Zhangsan COMP Lisi to self good

b. Wangwu renwei Zhangsan bi Lisi dui ziji hao
   Wangwu think Zhangsan COMP Lisi to self good
   ✓LDR: ‘WW thinks that ZS is better to him, than LS is to him.’
   ✓Sloppy: ‘WW thinks that ZS is better to himself, than LS is to himself.’

c. Wangwu renwei Zhangsan bi wo dui ziji hao (*LDR, ✓Sloppy)
   Wangwu think Zhangsan COMP I to self good

Mandarin Long-Distance Reflexive: The reflexive ziji ‘self’ may be indefinitely far from its antecedent (see (3a)). (3a) also shows that antecedents of ziji are limited to subjects; (3a, b) indicate that for ziji to receive a long distance reflexive interpretation, all the possible antecedents must agree in person. In addition, as shown in (3a), non-subjects do not block the long distance dependency of ziji. (3c) further shows that PP-complements can neither be the antecedent of ziji nor trigger the blocking effect.

(3) a. Wangwu renwei Zhangsan j gei-le Lisi/wok yi-pian guanyu ziji/j/*k/*h-de wenzhang
   Wangwu think Zhangsan give-PERF Lisi/I one-CL about self-POSS article
   ‘Wangwu said that Zhangsan gave Lisi/I an article about selfj/*k/*h.’

b. Wangwu renwei wo j gei-le Lisi j yi-pian guanyu ziji j/*g/*k-de wenzhang
   Wangwu think I give-PERF Lisi one-CL about self-POSS article

c. Wangwu renwei Zhangsan j [PP dui Lisi/wok] zhanshi ziji/j/*k de zuopin
   Wangwu think Zhangsan to Lisi/I exhibit self poss work
   ‘Wangwu thinks that Zhangsan showed Lisi/I the work of selfj/*k.’

One analysis proposed in the literature (Cole & Sung 1994; Huang & Liu 2001; a.o.) is that ziji undergoes cyclic LF-movement so that it may be locally c-commanded by its long-distance antecedent (see (4)); along this line (e.g., Cole & Sung 1994), the blocking effect in (3b) may be cast as the mismatch in person between ziji, which receives its value (indicated by superscriptions) from its closest possible antecedent, and other possible antecedents during the derivation.

(4) LF of (3a): [TP WWi, [. . ziji j, [. . CP [. . CP [. . [TP LS3 . . [ti [. . CP [. . [TP LS3 . . . . ti . ]]]]]]]]]

(5)-(6) shows that the availability of the coreference of ziji in the embedded adjoined clause and the matrix subject depends on the person feature of the subject in the embedded adjoined constituent. The generalization that is crucial to the puzzle in (2), as shown in (5b) and (6b), is that the coreference of ziji in the embedded adjoined constituent and the matrix subject is blocked if the subject in the embedded adjoined constituent does not agree with the matrix subject in person.
function (Reinhart and Reuland 1993) and hence with the denotation of (10a), the sloppy reading in (2a) can be derived semantically, as shown in (11).

The generalization from (5)-(6) together with the Parallelism Constraint of Ellipsis (Rooth 1992; Fox 2000; a.o.) accounts for the contrast in (2b, c). Due to the Parallelism Constraint of Ellipsis, which requires that the elided constituent and its antecedent receive parallel interpretations, there are only two possible LFs for (2b/c) (see (8a, b)). In LF 1 ((8a)), both tokens of ziji are locally bound by the subject in the bi-constituent and the embedded main clause respectively; in LF 2 ((8b)), both tokens of ziji are remotely bound by the matrix subject. In (2b), given that the subject in the bi-constituent (the standard) agrees with the matrix subject in person, both LFs are available to (2b) and hence an ambiguity results.

On the other hand, as shown in (5)-(6), subjects in the embedded subordinated constituent that differ from the matrix subject in person block the long distance coreference of ziji in the embedded subordinate constituent; hence, LF 1, but not LF 2, is available to (2c), and (2c) carries only the sloppy reading.

DA and LDR: In DA (see (9)), the standard, unlike the target, is not a syntactic subject, and only one occurrence of the gradable predicate and hence only one token of ziji is involved in the derivation of (2a).

Given the single token of ziji in the derivation, the sloppy reading can only be accounted for semantically: with the denotation of bi in (10b) (cf. Heim 1985) and the assumptions that ziji is a reflexivization function (Reinhart and Reuland 1993) and hence due ziji hao has the denotation in (10a), the sloppy reading in (2a) can be derived semantically, as shown in (11).

Assuming that ziji undergoes LF-movement out of the embedded clause and reflexivize the matrix predicate (Chomsky 1993; Huang & Liu 2001; a.o.), the LDR in (2b) is derived semantically as in (12b).

Nothing in such a semantic account, however, can exclude LDR in (2c) (see the LF (12)). Note that in DA no ellipsis occurs in the bi-constituent and the standard is treated on a par with the PP-complement or the indirect object; given that PP-complements and indirect objects (e.g., (3a, c)) do not block the long distance dependency of ziji, DA wrongly predicts that LDR is available in (2c). Any stipulation postulated in DA to account for the lack of LDR in (2c) would wrongly exclude the long distance dependency in (3a) and (3c), where the 1st person pronoun wo is the indirect object and the complement of PP respectively.

Conclusion: The long distance dependency of the bare reflexive ziji and the blocking effect in Mandarin comparatives suggest that the claim that the bi-constituent does not have a clausal-like structure is not conclusive as suggested by the proponents of DA.