## **Scrambling in Double Complement Constructions in Chinese**

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In this presentation I argue that Scrambling can be observed in certain double complement constructions in Chinese. Specifically, when NPs are Case marked, they can be moved freely without changing the meaning of the sentence.

#### 1. Introduction

(1a) is an example of double complement constructions in Japanese. As (1b) suggests, Japanese uses the strategy of Scrambling to change word order.

## (1) Scrambling

- a. John-ga Mary-ni hon-o ageru.
  - -Nom -Dat book-Acc give
- b. John-ga hon-o Mary-ni ageru.
  - -Nom book-Dat -Acc give

'John gives Mary a book.'

Let us move to the relevant data in Chinese. As the examples in (2) show, the counterpart seems to be available.

## (2) Chinese data

- a. John gei Mary song yi-ben shu.
  - to give one-piece book
- b.\* John yi-ben shu song gei Mary.

one-piece book give to

c. John ba yi-ben shu song gei Mary.

BA one-piece book give to

'John gives/gave Mary a book.'

### 2. Proposal

The grammatical relationship of the NPs being made explicit (by Case), certain double complement constructions in Chinese can be analyzed as involving Scrambling, with *ba* and *gei* 'to' as Case assigners.

- (3) Relatively free word order in Chinese
  - a. gei Mary John song yi-ben shu.
  - b. ba yi-ben shu John song gei Mary.
  - c. ??ba yi-ben shu gei Mary John song.

### 2.1 On *ba*

As (2a) and (2c) show, the object of ba is typically (though not always) the direct object of a verb. I adopt the analysis proposed by Huang (1982), taking ba as a dummy Case assigner. Hence ba and the post-ba NP form a constituent.

Next, I make the following assumption about Case assignment, a natural consequence of the fact that Case assignment follows an adjacency condition in Chinese (cf. Stowell (1981)).

(4) In Chinese the accusative Case is assigned by the verb to the following direct object. If it is preposed, *ba* is introduced to assign the accusative Case instead and form a constituent with the post-*ba* NP. It can then undergo Scrambling.

# 2.2 Surprising Constituents (cf. Takano (2002))

Surprising constituents refer to the following phenomenon: in Japanese cleft sentences the bracketed parts are focus elements and thus are regarded as syntactic constituents.

(5) a. John-ga ageta no wa [hon-o Mary-ni] da.

-Nom gave NM Top book-Acc -Dat is '(lit.) It is a book to Mary that John gave.'

- b. John-ga ageta no wa [Mary-ni hon-o] da.

  -Nom gave NM Top -Dat book-Acc is

  '(lit.) It is to Mary a book that John gave.'
- c. hon-o ageta no wa [John-ga Mary-ni] da. book-Acc gave NM Top -Nom -Dat is '(lit.) It is John to Mary that gave a book.'
- d. Mary-ni ageta no wa [John-ga hon-o] da.
  -Dat gave NM Top -Nom book-Acc is '(lit.) It is John a book that gave to Mary.'
- e. ageta no wa [John-ga hon-o Mary-ni] da. gave NM Top -Nom book-Acc -Dat is '(lit.) It is John a book to Mary that gave.'

Takano demonstrates convincingly that the derivation of these constituents includes oblique movement, an adjunction operation. Take (5a) for example:



NP1=Mary-ni, NP2=hon-o, V=ageta

Here NP2 undergoes oblique movement and adjoins to NP1, forming a new constituent. Then, this new constituent moves within the embedded clause and gets deleted at PF under identity with the focus element. Thus, before PF deletion, (5a) has the following structure (the italicized portion being deleted):

- (7)  $[hon-o_i [Mary-ni]]_j$  John-ga  $t_j$   $t_i$  ageta no wa [hon-o [Mary-ni]] da. Interestingly, we can find in Chinese the exact corresponding sentences for all those in (5):
  - (8) a. John song de shi [ba shu gei Mary].

give DE SHI BA book to

b. John song de shi [gei Mary ba shu].

give DE SHI [to BA book]

c.? ba shu song de shi [John gei Mary].

BA book give DE SHI [ to

d.? gei Mary song de shi [John ba shu].

to give DE SHI [ BA book]

e. ??song de shi [John ba shu gei Mary].

give DE SHI [ BA book to ]

These facts strongly lend support to the oblique movement approach, and indicate that although Scrambling is not a typical operation in Chinese, when the condition for it is met, it is indeed available. The operations in (5) and (8) are instances of Scrambling because the meaning of the sentences keeps unchanged.

#### References

Huang, C.-T. James (1982) Logical Relations in Chinese and the Theory of Grammar, Doctoral Dissertation, MIT. / Huang, C.-T. James, Y.-H. Audrey Li and Yafei Li (2009) *The Syntax of Chinese*, Cambridge University Press. / Stowell, Tim (1981) Origins of Phrase Structure, Doctoral dissertation, MIT. / Takano, Yuji (2002) "Surprising Constituents," *Journal of East Asian Linguistics* 11, 243-301.