

The head raising analysis of Mandarin prenominal relative clause

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Outline

- 1** Background: three competing analyses
- 2** Previous literature arguing for Head Raising Analysis of Mandarin prenomial relative clause
- 3** Scope effects favoring Head Raising Analysis of Mandarin prenomial relative clause
- 4** Summary and remaining questions

Three competing analyses

Where does the head of a relative clause (RC) originate?

Head External Analysis

outside the relative clause CP

Head Raising Analysis

inside the relative clause CP

Matching Analysis

internal representation of the external head

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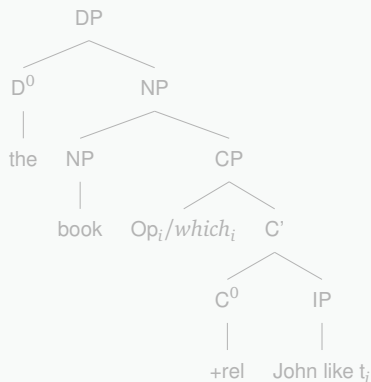
Matching Analysis

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Head External Analysis

- ▶ The head is originated outside of the relative clause CP. The relative clause CP involves A-bar movement of a relative operator and adjoins to the head.
- ▶ Quine 1960, Montague 1974, Partee 1975, Chomsky 1977, etc..

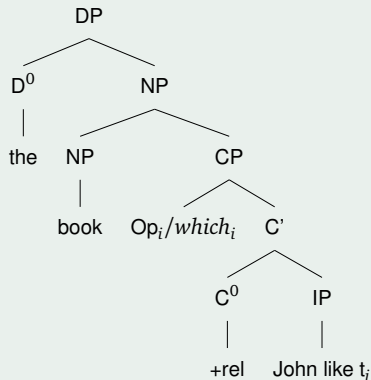
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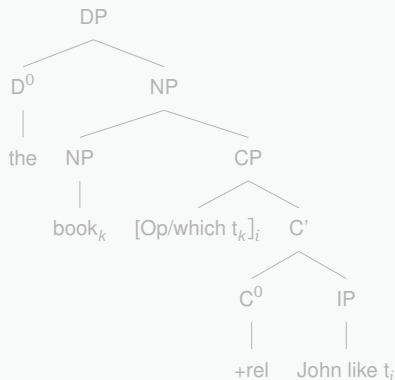
Example: *the book which John likes* (Bhatt 2002, ex.1)



Head Raising Analysis

- ▶ The head is originated inside of the relative clause CP; it can be reconstructed and interpreted in a relative clause internal position.
- ▶ Brame 1968, Schachter 1973, Vergnaud 1974, Kayne 1994, Bianchi 1999, Bhatt 2002 etc..

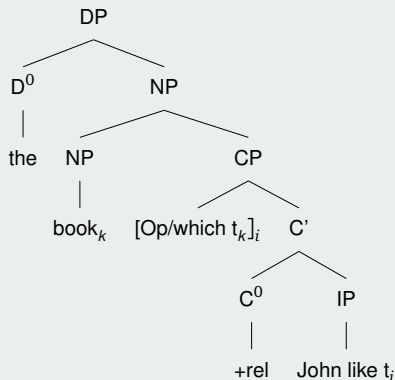
Example: *the book which John likes* (Bhatt 2002, ex.2)



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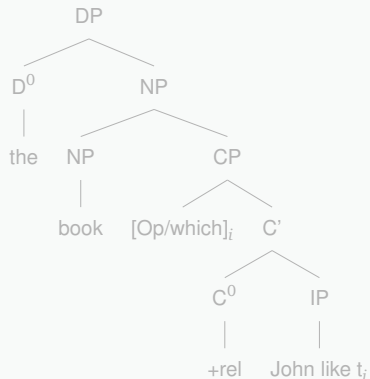
Example: *the book which John likes* (Bhatt 2002, ex.2)



Matching Analysis

- ▶ The external head has an internal head representation, but these two elements have same identity, but are not related by movement.
- ▶ Lees 1960, 1961; Chomsky 1965; Sauerland 1998, etc..

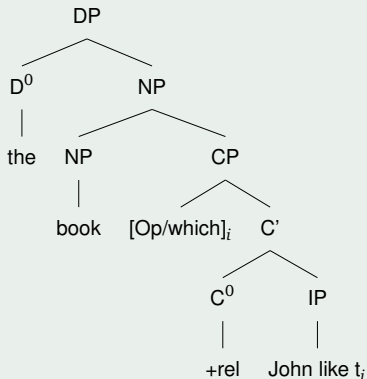
Example: *the book which John likes* (Bhatt 2002, ex.3)



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Example: *the book which John likes* (Bhatt 2002, ex.3)



Idiomatic expressions (Aoun and Li 2003)

- ▶ Suppose idiom can only appear as part of a larger expression and the special meaning is interpreted locally.

- (1) a. Ta hen rongyi chi cu.
he very easy eat vinegar
'He gets jealous easily.'
- b. [[Ta chi de] cu] bi shei dou da.
he eat DE vinegar compare who all big
'His jealousy is greater than anyone else's.'

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Binding effects (Aoun and Li 2003)

- (2) a. Wo jiao Zhangsan quan mei-ge-ren kai ziji
 I ask Zhangsan persuade every-cl-person drive self
 de chezi lai.
 DE car come
 'I asked Zhangsan to persuade everyone to drive his/her
 own car over.'
- b. [[Wo jiao Zhangsan quan mei-ge-ren kai
 I ask Zhangsan persuade every-cl-person drive
 lai de] ziji de chezi].
 come DE self DE car
 'self's car that I asked Zhangsan to persuade everyone to
 drive over.'

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Object control construction (Hsiao 2003)

- ▶ Assume that the head needs to reconstruct back to the object position of *ask*.

(3) a. Lao taitai yaoqiu nanhai qu zhao nuhai.
 old lady ask boy go look-for girl
 'The old lady asked the boy to look for the girl.'

b. [lao taitai yaoqiu qu zhao nuhai de nanhai] hen
 old lady ask go look-for girl DE boy very
 keai.
 cute
 'The boy who the old lady asked to look for the girl is very
 cute.'

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However, the argument from (1), (2) and (3) does not completely rule out either *Head external analysis* or *Matching analysis*.

- ▶ For example, the argument from idioms requires that the head and the remaining parts of the idiom were merged in a local configuration, but we can insert something in between, as in (4).

(4) Zongshi chi qian nvyou de cu bu hao.
always eat ex girlfriend DE vinegar not good
'It's not good to always be jealous because of the
ex-girlfriend(s).'

Adjectival modifiers

- (5) Lisi tidao-guo de Luxun xie-guo de diyi-ben-shu.
Lisi mention-asp DE Luxun write-asp DE first-cl-book
'a. For book x, x is the first book that Lisi had mentioned, but x is not necessarily the book that Luxun had written. ("high" reading)
b. For book x, x is the first book that Luxun had written, but x is not necessarily the first book that Lisi had mentioned'. ("low" reading, even preferred in Mandarin)'

Adjectival modifiers

With raising analysis under which the external head is originated inside the RC, we can derive both the high reading and low reading of (5).

- (6) the first book [_{CP} *that* [*Lisi said* [_{CP} *that Luxun written*]]]
- a. the λx first [book, x] [Lisi said that Luxun had written x].
 (“high” reading, interpreting the highest CP-internal copy)
 - b. the λx [Lisi said that [first Luxun had written [book x]]] (“low” reading, interpreting the lowest CP-internal copy)'

Amount relatives

The head of the RC is interpreted under the scope of another scope-bearing element inside the RC.

- (7) Laoshi gei Lisi buzhi-le [ta neng du de ji-ben shu].
teacher give Lisi assign-asp he can read DE few-cl book
'The teacher assigned the few books that Lisi can read.' (*can* >
few; *few* > *can*)

Binding plus scope effects

Example (8) shows that quantifiers inside a RC not only are able to bind a pronoun embedded in the external head, but also can scope over the scope-bearing element embedded in the external head.

- (8) Qiang shang gua-zhe mei-ge-mama tijiao de ta haizi
 wall on hang-asp every-cl-mom submit DE her child
 de liang-zhang-zhaopian
 DE two-cl-picture
 'On the wall hang two pictures for each of her children that every
 mom submitted.' (*every* > 2)

What can be reconstructed back?

- ▶ Bhatt (2002) argues that in English with head raising analysis of RCs, only NP can reconstruct.
- ▶ Aoun and Li (2003:133-135) also argue the same for Mandarin and the reasoning for this argument is that if the scope-bearing element inside the RCs can not scope over the external head, then it means that the quantifier associated with the external head does not undergo reconstruction.
- ▶ But, scope-bearing element inside the RCs can scope over the external head, cf.(9), cited from Huang (1982:214).

- (9) Wo mai-le san-ge-ren xie de mei-ben-shu
 I buy-asp three-cl-man write DE every-cl-book
 'a. There are three persons x such that I bought every book that x wrote.' ($3 > every$)
 'I bought every three-authored book.' ($every > 3$)

Summary

- ▶ Data from scope interpretation favor a head raising analysis of Mandarin prenominal RCs.
- ▶ There are some remaining questions such that
 - ▶ Is DE a C head (Aoun and Li 2003; Hsieh 2005) or a D head (Simpson 2001, 2003; Saito et al. 2008)?
 - ▶ Are these two constructions derivationally related? If yes, which one is the base one?
 - ▶ RC + demonstratives/ number+classifiers + noun
 - ▶ demonstratives/ number+classifiers + RC + noun (Aoun and Li (2003) suggest that this one is derived)
 - ▶ What causes the scope interpretation differences for these two constructions?
 - ▶ Wo mai-le [san-ge-ren xie de mei-ben-shu].
 - ▶ Wo mai-le mei-ben

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