

On the syntax of Mandarin postnominal relative clauses

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Overview & goals. Existing work on Mandarin syntax uniformly assumes that all Mandarin relative clauses (RCs) are prenominal (Li & Thompson 1981, Aoun & Li 2003, Huang, Li & Li 2009). In this paper, I present novel data to show that Mandarin has postnominal RCs (postNRCs) in addition to the canonical prenominal RCs (preNRCs). I then argue for a matching analysis which involves an external Head and movement of a null operator for the Mandarin postNRCs.

Basic form. Mandarin postNRCs and preNRCs are both formed with the subordinator *de*. The two types differ in the position of the RC and obligatoriness/prohibition of a pause between the RC and the Head: in preNRCs the RC is inseparable from the Head prosodically; in postNRCs the RC stands in an appositive position with a prosodically separated Head, indicated by commas in (1). Without additional evidence, there appear to be four potentially viable analyses (2)-(5) for sentence (1). I argue that the postNRC analysis is the correct analysis.

- (1) Nei-ge xuesheng, wo jiao-guo de, mingtian hui lai.
that-CL student I teach-PFV SUB tomorrow will come
'That student, who I've taught before, will be coming tomorrow.'
- (2) [_{DP} Nei-ge xuesheng]_i, [_{DP} [_{RC} wo jiao-guo *t_i* de] [_{DP} nei-ge (xuesheng)]_i]
'that student, that student who I've taught before'
- (3) [_{DP} Nei-ge xuesheng], [_{nP} [_{RC} wo jiao-guo *e* de]] 'that student, the one I've taught before'
- (4) [_{DP} nei-ge xuesheng]_i, [_{RC} wo jiao-guo *t_i* de] 'that student, who I've taught before'
- (5) [_{TP₁} [_{DP₁} nei-ge xuesheng], [_{TP₂} wo jiao-guo *e* de], [_{vP₁} mingtian hui lai]]
'That student – I've taught him/that student before – will be coming tomorrow.'

Arguing for the relative clause analysis. I present five arguments that the postnominal *de*-phrase is a relative clause. The first two pieces of evidence show that the syntactic category of the *de*-phrase is clausal. First, nominal conjunction *he* cannot be used to conjoin two appositive *de*-phrases; clausal conjunction *bingqie* has to be used (6). Second, only adjectives used predicatively, i.e. with a degree word, are allowed in *de*-appositives (7). Analyses (2)-(3) are thereby ruled out. The next three pieces of evidence show that the appositive *de*-clause is subordinate. First, subordinate clauses in postnominal position can be stacked, while unambiguous full clauses cannot occur stacked in postnominal position (8). Second, the particle *suo* is used only in relativization or passivization (Chiu 1995), and is permitted in *de*-appositives. Third, dynamic verbs in Mandarin full clauses need to be aspect-marked, while non-overtly aspect-marked clauses resembling reduced RCs in languages where this feature is conspicuous (e.g. English) are allowed in *de*-appositives.

- (6) a. **Nei-shou gequ**, [wo xihuan de] bingqie [Mali ye xihuan de], shi shou lao ge.
that-CL song I like SUB and Mary (also) like SUB COP CL old song
'That song, which I like and which Mary also likes, is an old song.'
b. ***Nei-shou gequ**, [wo xihuan de] he [Mali (ye) xihuan de], shi shou lao ge.
that-CL song I like SUB and Mary (also) like SUB COP CL old song
- (7) a. Nei-tai diannao *(tebie) jiu. / that-CL computer very old / 'That computer is very old.'
b. **Nei-tai diannao**, [*(tebie) jiu de], mingtian yao huishou le.
that-CL computer particularly old SUB tomorrow will recycle SFP
'That computer, which is very old, will be recycled tomorrow.'

- (8) a. **Nei-ge ren**, [RC₁ wo renshi de] [RC₂ hen xihuan yinyue de], shi wo linju.
that-CL person I know SUB very like music SUB COP I neighbor
'That person, who I know who likes music, is my neighbor.'
- b. *Nei-ge ren, [TP₁ wo renshi ta] [TP₂ ta hen xihuan yinyue], shi wo linju.
that-CL person I know he he very like music COP my neighbor
Intended: 'That person, I know him and he likes music, is my neighbor.'
- (9) **Nei-jian shiqing**, [laoshi suo yizai qiangdiao de], ni qianwan bie wang le.
that-CL matter teacher SUO repeatedly emphasize SUB you surely NEG forget SFP
'That matter, which the teacher has repeatedly emphasized, you must not forget.'

Towards a syntactic analysis. In contrast to Mandarin preNRCs, for which a raising analysis has been (partially) adopted (Aoun & Li 2003), I present three arguments that motivate a matching analysis for the postNRCs. The first two types of evidence show that Mandarin postNRCs involve a base-generated Head and an adjunction structure. First, lack of reconstruction effects from anaphor binding (10) and idiomatic expressions (11) suggests that the relative Head is not derived via moving out of the RC. Second, the interrogative reading is blocked for ambiguous *wh*-words (12) if they occur in subject position in postNRCs (13). This can be easily explained if we posit an adjunction structure for the postNRCs: the postNRC is adjoined as an adjunct to the base-generated Head later in the derivation, after binding between the matrix *wh*-operator and a proper variable has taken place. The final piece of evidence shows that movement is involved in deriving the postNRCs: evidence from long-distance dependency and island effects shows that Mandarin postNRCs exhibit the basic properties of A'-movement, pointing to a null relative operator.

- (10) a. ***Nei-fu ta-ziji_i de hua**, [Xiaoming_i hua de], hen hao-kan.
that-CL he-self DE painting Xiaoming paint DE very good-look
Intended: 'That painting of himself that Xiaoming has painted looks very good.'
- b. [Xiaoming_i hua de] **nei-fu ta-ziji_i de hua** hen hao-kan.
'That painting of himself that Xiaoming has painted looks very good.'
- (11) a. ***Nei-ge niu**, [Xiaoming qunian chui de], dao xiaozai dou hai mei duixian.
that-CL boasting Xiaoming last.year blow DE till now PTC still NEG fulfill
Intended: 'X. hasn't accomplished what he last year boasted he'd have accomplished.'
- b. [Xiaoming qunian chui de] **nei-ge niu** dao xiaozai dou hai mei duixian.
'Xiaoming has not fulfilled the boasting that he made last year.'
- (12) Ni jian-dao shui le?
you meet-RES who/someone SFP
'Who did you meet?' OR 'Did you meet with someone?'
- (13) **Nei-ge xuesheng**, [shui jiao lai bangmang de], zai menkou deng-zhe ne.
that-CL student someone call come help DE at doorway wait-DUR SFP
'That student_i, who_i someone_j has asked to come and help, is waiting at the door.'
- Unavailable*: 'That student_i, who_j has asked to come and help, is waiting at the door.'

Further implications. Contrasts between Mandarin pre- and postNRCs support the view that both raising and matching strategies for relativization may be present in one language. The structure of the postNRCs also lends support to the classic adjunction analysis of appositive RCs (Citko 2008).

Selected references. Aoun & Li 2003, *Essays on the Representational and Derivational Nature of Grammar: The Diversity of Wh-Constructions*. Citko. 2008. 'An Argument against Assimilating Appositive Relatives to Coordinate Structures'. Huang, Li & Li 2009, *The Syntax of Chinese*.