The syntax of non-restrictive relative clauses: a Mandarin case
Jing Gao, Cornell University

Overview & goals. Existing work uniformly assumes that all Mandarin relative clauses (RCs) are pronominal (Aoun & Li 2003, Huang, Li & Li 2009). In this paper, I present a novel construction in Mandarin and show it is a non-restrictive postnominal RC (postNRC) (1). I then argue for a matching analysis which involves an external head and movement of a null operator for this construction. This analysis fits well into the broader discussion of an adjunction analysis of non-restrictive RCs (Citko 2008), while casting doubt on alternatives such as the coordination (De Vries 2006) and the ParP analyses (Griffith & De Vries 2013).

(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.’

The construction. Mandarin postNRCs and preNRCs are both formed with the subordinator de. The two types differ in the position of the RC and obligatory/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. Without additional evidence, there appear to be four potentially viable analyses (2)-(5) for sentence (1). I argue that the postNRC analysis (4) is the correct analysis.

(2) [DP Nei-ge xuesheng], [DP RC wo jiao-guo t1 de] [DP neige (xuesheng)],
‘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], [RC wo jiao-guo t1 de] ‘that student, who I’ve taught before’
(5) [TP1, [DP, nei-ge xuesheng], [TP2 wo jiao-guo e de], [VP 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 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
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 unselective 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.

Non-restrictiveness. I apply three diagnostics from Constant (2011) to test whether Mandarin postNRCs are (non-)restrictive. The independence, undeniability and scopelessness tests all suggest non-restrictiveness.

Further implications. Mandarin postNRCs have structural differences from non-restrictive RCs in other languages, calling for a re-examination of existing analyses of non-restrictives. The construction’s unambiguous status as a clause and not an NP questions the coordination analysis. Its prohibition of non-nominal head questions the need to posit a special functional projection, e.g. Parenthetical Phrase, to account for non-restrictives. On the other hand, the structure of Mandarin postNRCs lends strong support to the classic adjunction analysis of non-restrictive RCs. Contrasts between Mandarin pre- and postNRCs also support the view that both raising and matching strategies for relativization may be present in one language.