1. Issues and Goals

Issues in the analysis of relative clauses:

- Structure and interpretation: adjunction or promotion, universal word order, Kayne’s LCA and no-right-adjunction hypothesis, intersective vs. non-intersective interpretation, restrictive vs. non-restrictive, a third kind?, etc.
- Chinese relativization: old problems and new problems. What does Chinese have to say about the LCA?; do Chinese relatives involve movement, base-generation, neither or both?; interpretation of relative clauses: intersective vs. predicative, restrictive vs. appositive; the status of ‘non-gap’ relatives, etc.

Kayne (1994)

- SVO
  Linear Correspondence Axiom
  No right adjunction structures
  → In SOV languages, O in Spec of some projection above VP

(1) The Promotion Analysis for English relatives

(2) The Promotion Analysis of Relative Clauses for N-final languages
Arguments against Promotion Kaynean style
- DP/NP distinction and conjunction
- similarities with prenominal adjectives

2.1. Adjunct Relativization (vs. Topicalization) (see Ning 1993)

(1) a. *zhe chechang, ta bu xiu che.
   this garage he not fix car
   This garage, he does not fix cars.
   
   b. *nage yuanyin, ta meiyou canjia kaihui.
   that reason he not join meeting
   That reason, he did not participate in the meeting.
   
   c. *nage fangfa, he xiu hao le wo-de che.
   that way he fix well LE my car
   That way, he fixed my har.

(2) a. ta bu xiu che de chechang
   he not fix car DE garage
   The garage where he does not fix cars
   
   b. ta meiyou canjia kaihui de yuanyin
   he not join meeting DE reason
   The reason he did not participate in the meeting

   c. ta xiu hao le wo-de che de fangfa.
   he fix well LE my car DE way
   The way he fixed my car.

(3) a. zai zhe chechang, ta bu xiu che.
   at this garage he not fix car
At this garage, he does not fix cars.

b. yinwei zhege yuanyin, ta meiyou canjia kaihui.
    because this reason he not join meeting
    Because of this reason, he did not participate in the meeting.

c. youg nage fangfa, he xiu hao le wo-de che.
    with that way he fix well LE my car
    In that way, he fixed my car.

(4) a.  

(5)  

(6) a. Long-distance adjunct relatives
    zhe jiu shi [wo tingshuo [ta xiu hao nabu che]] de chechang
    this is  I heard he fix well that car DE garage
    This is the garage where I heard that [he fixed the car e₁].

b. Island effects
    *zhe jiu shi [wo xihuan [xiu-le nabu che de ren]] de chechang
    this is  I like fixed that car DE person DE garage
    *This is the garage where I like the person [who fixed the car e₁].

• The adjunct relatives involve movement of Null Operator (wh-operator, cf. below) of PP category. Such relatives cannot be derived under the head-promotion analysis. (Head promotion would be ruled out by P-stranding prohibition, just as the ungrammatical adjunct topic structures show.)

2.2. Subject-Object Asymmetries and Island Constraints
(7) a. Zhangsan, [e chang ge de shengyin] hen hao ting.  
Zhangsan sing song DE voice very nice hear  
Zhangsan, the voice with which [e] sings is good.

b. *Zhangsan, wo zui xihuan [e chang ge de shengyin].  
Zhangsan I most like sing song DE voice  
Zhangsan, I like the voice with which [he] sings.

c. Zhangsan, [e chang ge shengyin], wo hen xihuan.  
Zhangsan sing song voice I very like  
Zhangsan, the voice with which [he] sings, I like.

(8) a. [[e chang ge shengyin]hen haoting] de neige ren ... zou-le  
The person such that the voice with which [he] sings is good ... has left.

b. *[wo zui xihuan [e chang ge de shengyin]] de neige ren ... zou-le.  
The person such that I like the voice with which [e] sings ... has left.

c. [[e chang ge shengyin] wo hen xihuan] de neige ren ... zou-le.  
The person such that the voice with which [he] sings I like ... has left.

(9) Generalized Control Rule (Huang 1984, inter alia)  
Coindex a Pro with the closest nominal element.  
(cf. Hu and Pan 2000: the GCR should be relativized to pragmatic considerations.)

(10) a. Zhangsan, [piping e de ren] hen duo.  
Zhangsan, people who criticize [him] are many.

b. *Zhangsan, wo renshi hen duo [piping e de ren]  
Zhangsan I know many people who criticize [him].

(11) a. na-ben shu, [kan bu dong e de ren] hen duo.  
That book, people who don’t understand [it] are many.

b. na-ben shu, wo renshi hen duo [kan bu dong e de ren].  
That book, I know many people who don’t understand [it].

(12) a. Zhangsan, wo bu xihuan.  
Zhangsan, I don’t like.

b. wo tingshuo Lisi zui xihuan e de na-ge ren ...  
The person who I heard that Lisi likes most ...  

- Corollary 1: The Move strategy must be an available (for those cases obeying island constraints).
- Corollary 2: The Pro strategy plus Merge Head must also be available (for those exhibiting apparent island violations). Such constructions cannot be generated under the head-promotion analysis.

2.3. “Resumptive Wh-Phrases” (see Ning 1993)

(13) a. ta zenme xiu che de fangfa, meiyou ren xiaode.  
he how fix car DE method nobody knows
The way (how) he fixed the car, nobody knows.

b. zhe jiushi [ta weishenme meiyou lai] de yuanyin.
   this is he why not come DE reason
   This is the reason why he did not come.

(14) Long Distance “Wh-resumptives”:

a. zhe jiushi [ta juede ni yinggai ruhe/zenme xiu che] de fangfa.
   this is he feel you should how fix car DE method
   The is the method (how) he feels you should fix the car.

b. zhe jiushi [women yiwei ta weishenme meiyou lai] de yuanyin.
   this is we think he why not come DE reason
   This is the reason why we think [he did not come e].

(15) Island effects:

*zhe jiushi [ruguo ta weishenme chi dao, ni jiu bu gaoxing] de yuanyin.
   this is if he why late come you then not happy DE reason
   This is the reason x such that you will not be happy if he arrives late
   because of x.

• The ‘wh-resumptives’ exhibit the property of traces
  → Copy + merge = movement (without subsequent deletion of the tail)
  → wh-resumptive is not a resumptive pronoun, but equivalent to a ‘trace’
  → the ‘moved’ operator is a wh-operator [but -Q]; possibly moved features
  → these constructions are not derivable by promotion

• The ‘wh-resumptives’ do not occur with who, what, where, when.
  → Why should this be the case?
  → DP/PP operators; objectual vs. non-objectual

2.4. Conclusion:
• Evidence for operator movement
• Evidence for operator being [+wh]
• Evidence for merging head and the pro-identification strategy
• Evidence against Promotion in some cases

3. The Status of Non-Gap Relatives

3.1. The Interpretation of Relatives
• Intersective vs. predicative modification
• So-called “restrictive vs. appositive” in Chinese: basically the intersective kind
• The role of an operator and non-vacuous quantification

3.2. Non-gap Relatives

(16) a. ta chang ge de shengyin hen haoting
    he sing song DE sound very good to hear
    The sound of his singing songs is very good to hear.
b. ta kaoshi de jieguo hen bu lixiang.
he exam DE result very not ideal
The result of his taking the exam was very unsatisfactory.

c. ta zuo-e de houguo ling ta houhui.
he do-evil DE result cause him regret
The consequence of him doing evils caused him to regret.

d. ta sha ren de jiama kai-de tai lipu le.
he kill people DE price offer too outrageous
His asking-price for killing people is too outrageous.

e. xingqi tian yizao keyi hui jia de qianti.
sunday early can go home DE pre-condition
The precondition that we be able to leave early on Sunday...

(17) Gaplessness and no movement:
→ No long-distance dependency, no island effects:

a. *zhe jiushi wo tingshuo ta chang ge de shengyin.
this is I heard he sing song DE sound
This is the sound that I heard that he sang songs.
≠ the sound of singing songs

b. *zhe jiushi wo zhida ta zuo-e de houguo.
this is I know he do-bad DE consequence
This is the consequence of my knowing that he did evils.
≠ the consequence of doing evils

(18) Are these gapless relatives?
• What’s the interpretation? Intersective/predicative?
• Proposal: these are structures of complementation, not of modification
• Nouns like consequence, price, condition, consequence are relational nouns with argument places to be saturated. The so called gapless relatives are in facts complements that saturate these argument places. Compare also girl (non-relational) with companion or partner (relational):

a. *ta tiao wu de guniang
he dance DE girl
Intended: the girl with whom he danced.

b. ta tiao wu de banlü.
he dance DE companion
The partner of his dancing; his dancing parter.

(18b) should not be analyzed as relative clause involving a ‘comitative adjunct’ operator meaning ‘with whom’, on a par with the partner with whom he danced. If that were possible, there is no reason why (18a) could not be grammatical with a similar analysis: the girl with whom he danced. Note the contrast between (18a) and (18b) is mirrored in English below:

c. *his girl of dancing
d. his partner of dancing

(19) guniang vs. banliu
   a. guniang is a one-place predicate: \( \lambda x \) (guniang (x)); (18a) is out by theta-theory because ‘he danced’ does not bind an argument position.
   b. banliu is a two place predicate: \( \lambda x \lambda y \) (banliu (x, y))
      \[ ta\ tiao\ wu = y \]
      \[ ta\ tiao\ wu\ de\ banliu = \lambda x (banliu (x, ta\ tiao\ wu)) \]

   \( \rightarrow \) “Gapless relatives” are nominal complements.
   \( \rightarrow \) the non-existence of gapless relatives

(20) Move evidence for complement status
   a. Zhangsan de hen piaoliang de tiao wu de wuban
      Zhangsan DE very pretty DE dance DE partner
      Zhangsan’s very pretty dancing partner
   b. *Zhangsan de tiao wu de hen piaoliang de wuban.
      Zhangsan DE dance DE very pretty DE partner
      *Zhangsan’s dancing very pretty partner.

   a. Spec > Adjunct > Complement > Head
   b. *Spec > Complement > Adjunct > Head

(21) Yafei Li (1997): DP complements may precede adjuncts
   a. Yang Xiansheng de dui Hunglowmeng de yisibugou de fanyi.
      Yang Mr. DE to Hunglowmeng DE meticulous DE translation
      Mr. Yang’s meticulous translation of HLM.
   b. *Yang Xiansheng yisibugou de dui Hunglowmeng de fanyi.
      Mr. Yang’s meticulous translation of HLM.

   \( \rightarrow \) DP complements cannot stay in surface complement position; but PP or clausal complements can.

3.3. Constraints on Adjunct Relativization

- OK: time, place, reason, means/manner/instrument
  *: comitative, result, etc.

- Ning: one-word vs. phrasal adjuncts: only single-word operators can have null counterparts. Multiple-word operators cannot be null.
  Problem: ta xizao de feizao ‘the soap that he bathes’

- Or: adverbial adjuncts that relativize are arguments of certain functional categories (Cingue 1999).
  Comitative, etc. are truly adjuncts. They cannot be relativized by the NOP strategy.

4. Idioms and Promotion
(22) a. We made headway.
    b. *The headway was satisfactory.
    c. The headway we made was satisfactory.

(23) a. ta kai-de dao dou hen chenggong.
    The operations he performs are all successful.

b. ta you-de mo meiyou ren ting-de-dong.
    Nobody understand his humor.

(24) a. [ta renwei [wo yinggai kai]] de dao dou hen nan.
    The operations that he thinks I should perform are all difficult.

b. *[ta kai e] hen zhongyao] de dao buneng you bieren daiti.
    The operations that it is important that he perform cannot be done by others.

    The person whose humour is much talked about is famous.

b. *[e you e de ren] hen youming de mo] daduo neng guang wei liuchuan.
    The kind of jokes that those who told them are famous usually get widely talked about.

(26) Idiom chunk arguments: a mixed bag

a. ta zongshi xihuan you [bieren shou-bu-liao] de mo.
    He always likes the kind of jokes that others can’t stand.

b. Parky pulled the strings that got me my job. (MacCawley)

5. Summary and Implications

- Evidence for OP movement
- Evidence for head-merging
- Existence of prenominal complements