

## Relativization: Order and Structure

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IICCL-9/IACL-9, Singapore, June 26-28, 2000

### 1. Issues and Goals

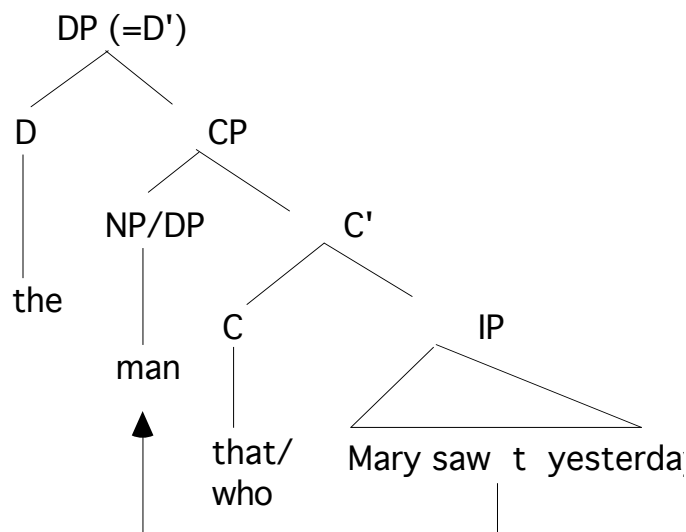
Issues in the analysis of relative clauses:

- 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.

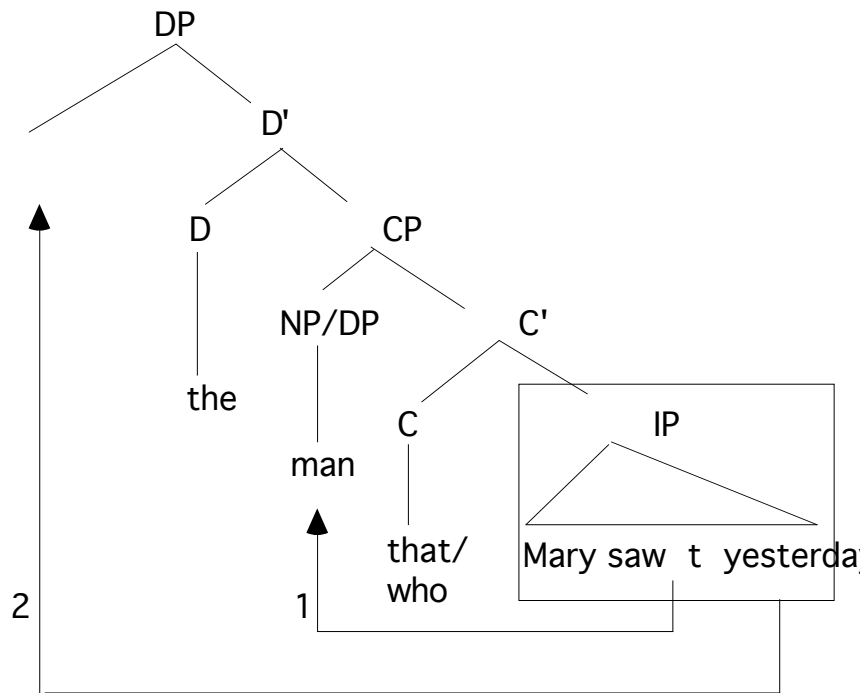
### Kayne (1994)

- 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

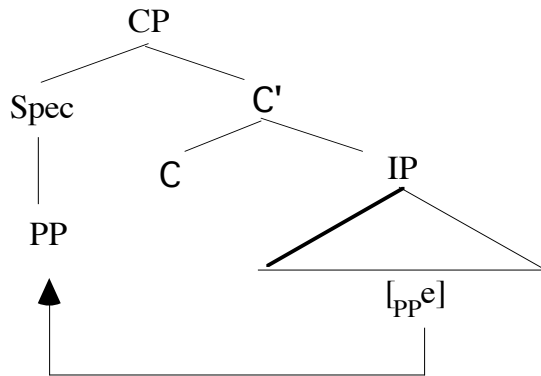
### 2.1. *Adjunct Relativization (vs. Topicalization)* (see Ning 1993)

- (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 car.
- (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

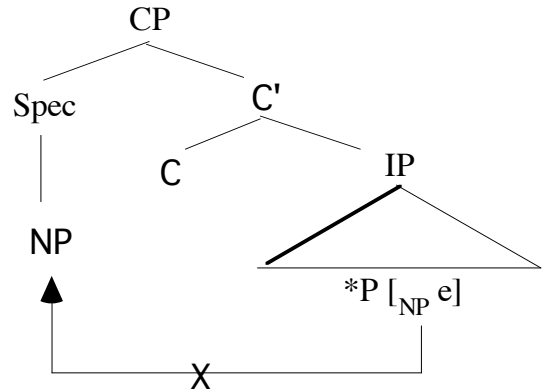
At this garage, he does not fix cars.

- 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.

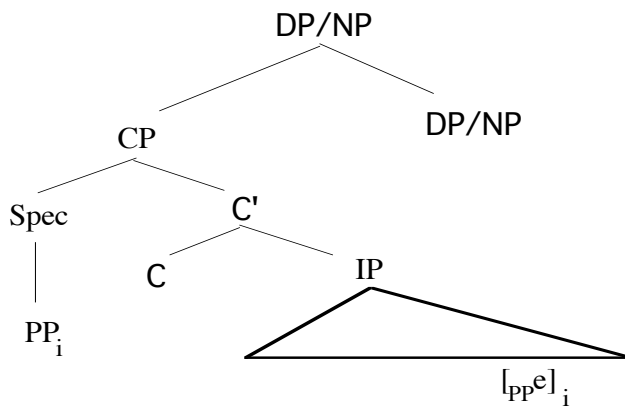
(4) a.



b.



(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<sub>i</sub> I heard that [he fixed the car e<sub>i</sub>].

- 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<sub>i</sub> I like the person [who fixed the car e<sub>i</sub>].

- 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 zhidao 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 fact 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 partner.

(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. *banlü*

- 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. *banlü* is a two place predicate:  $\lambda x \lambda y$  (*banlü* (x, y))  
*ta tiao wu* = y  
*ta tiao wu de banlü* =  $\lambda x$  (*banlü* (x, *ta tiao wu*))
- "Gapless relatives" are nominal complements.  
 → 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.

→ 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.  
 he open-de knife all very successful  
 The operations he performs are all successful.
- b. ta you-de mo meiyou ren ting-de-dong.  
 he hu-de -mour not person understand  
 Nobody understand his humor.
- (24) a. [ta renwei [wo yinggai kai]] de dao dou hen nan.  
 he think I should open DEknife all very difficult  
 The operations that he thinks I should perform are all difficult.
- b. \*[[ta kai e] hen zhongyao] de dao buneng you bieren daiti.  
 he open very important DE knife cannot by others replace  
 The operations that it is important that he perform cannot be done by others.
- (25) a. [[pro you e mo] wei ren suo jinjin-le-dao de nage ren] hen youming.  
 hu- de mour by people talked-about DE that person very famous  
 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.  
 hu- DE person very famous DE mour mostly can widely get spread  
 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 like hu- others can't-stand DE -mour  
 He always likes to tell 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