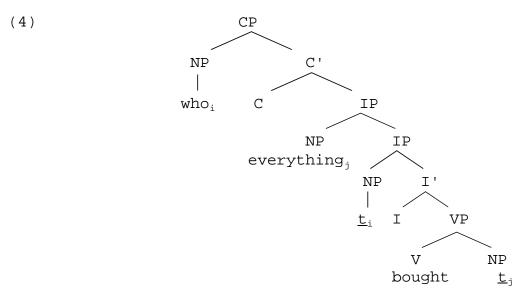
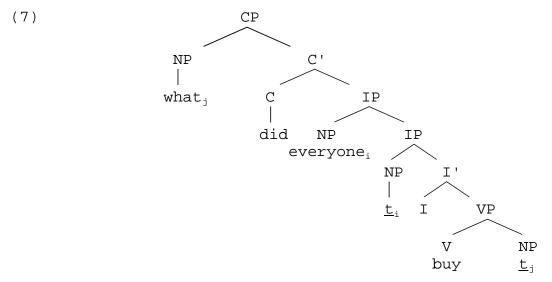
## WH - Quantifier Interactions 1

(Based on May (1985) Logical Form)

- (1) What did everyone buy (ambiguous: group purchase WH >  $\forall$ ; or 'family of questions'  $\forall$  > WH)
- (2) Who bought everything (unambiguous; no family of questions)
- (3) Who saw everyone (unambiguous; no family of questions)

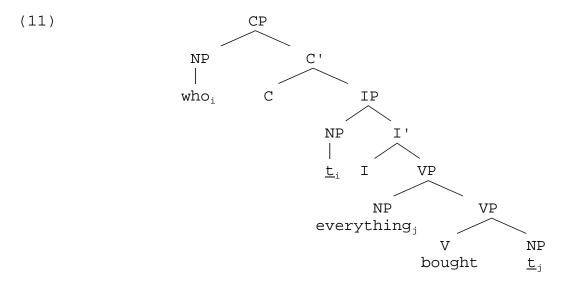


- (5) According to May (1985),(4) would have the family of questions reading if it were well-formed.
- (6) Constraint: Intersecting A'-categorial paths must embed, not overlap. [Path Containment Condition of Pesetsky (1982)]



- (8) How does (7) provide the family of questions reading?
- (9)a IP (=S) is not a maximal projection.
  - b Operators that govern each other are free to take on any type of relative scope relation. (7) represents both readings.)

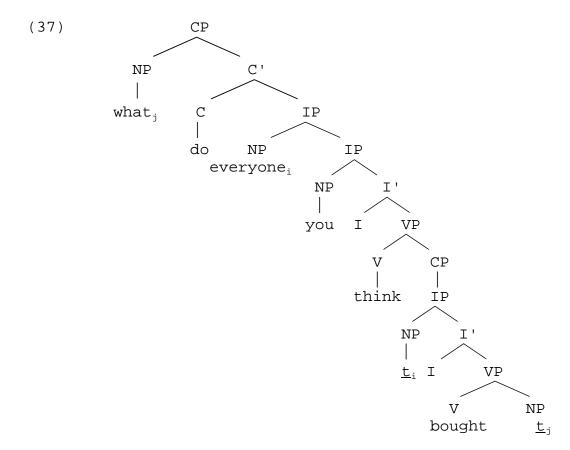
(10) Why is (2) good at all, on any reading?



- (12) The target of QR is not limited to IP.
- (13) Adjunction creates a 'segmented' category, rather than an additional maximal projection. A segment does not block c-command. [Borrowed by Chomsky in Chomsky (1986).]
- (14) Then why doesn't (11) give rise to a family of questions reading?
- (15) Even a segment of a maximal projection blocks government.
- (16) Who do you think [everyone saw t at the rally]
- (17) Williams (1986) observes that this example of May's, which as May notes does have the ambiguity, causes a difficulty for May's analysis:
- (18) Everyone must scope out of the embedded finite clause, but this is normally not possible (especially for a nominative quantifier), as illustrated in (19).
- (19) Someone thinks everyone saw you at the rally
- (20) Larson and May (1990) make a very similar point: "whereas quantified subjects can be given scope out of infinitives, this is not generally possible with tensed complements."

  "...whereas [(21)a] permits a wide-scope reading for everyone vis-à-vis someone and believe, according to which for each person x there is someone who believes x is a genius, [(21)b] permits only a narrow-scope reading for everyone, according to which there is some person who believes genius to be a universal characteristic".
- (21)a Someone believes everyone to be a genius
  b Someone believes (that) everyone is a genius

- (22) A possible alternative treatment:
- (23) While for May the WH-Q interactions are between the Wh-phrase and the Q, what if it is the WH-trace and the Q that interact?
- (24) What did everyone<sub>i</sub> buy with his<sub>i</sub> bonus money Lasnik and Saito (1992)
- (25) Surprisingly, (24) lacks the group purchase reading. This suggests that May's original ambiguity is not actually a scope ambiguity, since <a href="every...">every...</a> can bind a singular pronoun whether it has wide or narrow scope:
- (26) Some coach gave every lineman, his, assignment
- (27) Conjecture: Group purchase reading involves a 'group' interpretation of the universal, not a genuine quantificational reading. The quantificational reading **is** involved in the family of questions reading.
- (28) Everyone bought something
- (29) Someone bought everything
- (30) Everyone, bought something with his, bonus money
- (31) A very old idea: what = wh+something; who = wh+someone.
- (32) What did you buy
- (33) you bought WH-something
- (34) WH [you bought \_-something]
- (35) WH [everyone bought \_-something]
- (36) What do you think everyone bought



- (38) WH you think [everyone bought \_-something]
- (39) You think [everyone bought something]
- (40) You think that  $\forall x \exists y \mid x \text{ bought } y$
- (41) WH You think that  $\forall x \exists y \mid x \text{ bought } y$
- (42) What does everyone think you bought  $\underline{t}$  [Sloan (1991), pointing out another problem for the analysis in May (1985)]
- (43) WH everyone thinks [you bought -something]
- (44) Everyone thinks you bought something
- (45)  $\forall x \ x \ \text{thinks} \ \exists y \mid you \ \text{bought} \ y$
- (46)  $\neq \forall x \exists y \mid x \text{ thinks you bought } y$
- (47) May (1977) makes exactly the same factual claim about a completely parallel example:
- (48) Who did everyone say that Bill saw

## References

- Chomsky, Noam. 1986. Barriers. Cambridge, Mass.: MIT Press. Larson, Richard and Robert May. 1990. Antecedent containment or vacuous movement: Reply to Baltin. Linguistic Inquiry 21: 103-122.
- Lasnik, Howard and Mamoru Saito. 1992. Move  $\alpha$ . Cambridge, Mass.: MIT Press.
- May, Robert. 1977. The grammar of quantification. Doctoral dissertation, MIT, Cambridge, Mass.
- May, Robert. 1985. Logical Form: Its structure and derivation. Cambridge, Mass.: MIT Press.
- Pesetsky, David. 1982. Paths and categories. Doctoral dissertation, MIT, Cambridge, Mass.
- Sloan, Kelly. 1991. Quantifier-wh interaction. In MIT Working Paper in Linguistics 15, 219-237.
- Williams, Edwin S. 1986. A reassignment of the functions of LF. Linguistic Inquiry 17: 265-299.