

Williams 1974

- (1) John must win more races than I do in order to win a prize.
"no matter how many races I win, J must win more"
"the comparison is semantically subordinate to the modal: $M(Q_1, Q_2)$ "
- (2) John must win more races in order to win a prize than I do.
"I have to win a certain number, and J has to win a certain number, and one number is greater than the other"
" $Q_1(M), Q_2(M), Q_1 > Q_2$ "

- (3) [must in order to win a prize]
(\Box_d .John win d-many races [-er than wh_d. I win ~~d-many races~~])
or: John₁ [must in order (for x₁ to win a prize)]
(\Box_d .x₁ win d-many races [-er than wh_d. I win ~~d-many races~~])

- (4) \Box_d . [must in order to win a prize] John win d-many races
[-er than wh_d. ~~{must in order to win a prize} I win d-many races~~]
or: \Box_d .John₁ [must in order for x₁ to win a prize] x₁ win d-many races
[-er than wh_d. I₂ ~~{must in order for x₂ to win a prize} x₂ win d-many races~~]

implied predictions:

- (5) (a) <*> John must win more races than I must (win) in order to win a prize.
(b) <ok> John must win more races than I win in order to win a prize.
(c) <ok> John must win more races in order to win a prize than I must (win).
- (6) We would have made so much more if he hadn't been there that next year we will hold the meeting in secret.
- (7) *We would have made so much more that next year we will hold the meeting in secret if he hadn't been there .
- (8) We would have made so much more that we could have retired if he hadn't been there.
- (9) We would have made so much more if he hadn't been there that we could have retired.
- (10) *If John hadn't been there, we would have made so much more money that next year we are holding the meeting in secret.

- (11) "a clause associated with a scopal item extraposes to the end of that scope" (p. 195)
- (12) So seldom did anyone approach the doctor who had a real problem that he decided to retire.
- (13) *So seldom did anyone approach the doctor that he decided to retire who had a real problem.
- (14) *No one got so tired who was using a shovel that he decided to quit.
- (15) *No one got so tired that he decided to quit who was using a shovel.

What's wrong with (15)? See also Williams' judgment on (16):

- (16) *Mary was upset by John's destroying so many boats that the harbor was closed.
compare also:

- (17) <> No one got more tired than he could tolerate who was using a shovel.
- (18) <> No one got too tired to be able to finish who was using a shovel.
- (19) <> No one got tired enough to complain who was using a shovel.
- (20) <> No one got as tired as you who was using a shovel.

Fox & Nissenbaum 1999, Fox 2002 on extraposition from DP

- (21) two kinds of extraposition:
- (a) rightward movement
 - same constraints as leftward mvt (e.g. can't move adjuncts out of NPs, can't move anything out of definites)
 - lower copy present at LF
 - (b) late merger into a covertly moved phrase
 - constraints are only those for mvt of containing phrase
 - no lower copy present at LF
 - trace of containing phrase must be interpretable without it

- (22) trace conversion:
[Quantifier Restrictor]_i => *the Restrictor (identical to) x_i*
i.e., the y such that Restrictor(y) = 1 & y = x_i
- (23) extraposition of parts of DP:
a sister of mine whom you have met
- (a) *of mine*: argument of *sister*
ok generate and leave in situ
ok rightward mvt
* late merger into QRed DP
(reason: *sister* is of type <e,et>, lower copy uninterpretable)
- (b) *whom you've met*: modifier of *sister*
ok generate and leave in situ
* rightward mvt (reason: "adjunct" (?))
ok late merger into QRed DP
(*the sister of mine x* makes a fine interpretable trace)
- (c) *sister of mine whom you've met*: argument of *a*
ok generate and leave in situ
* rightward mvt (reason: ?)
* late merger into QRed DP
reason: ?
No obvious reason why trace conversion needs any restrictor.
Maybe QR of bare Det would have to be head-mvt?

How do we expect this to carry over to DegP?

- (24) trace conversion for DegPs:
- (a) [-er]_i => *the (degree) d_i*
- (b) [-er than wh_j ... t_j ...]_i => *the (degree) [wh_j ... t_j ...] d_i*
i.e., the d such that ... d ... & d = d_i
better not!

- (25) extraposition of part of DegP:
-er than wh_j ... t_j ...
than wh_j ... t_j ...: argument of *-er*
* generate and leave in situ
reason: restrictor creates uninterpretable trace¹
* rightward mvt
reason: restrictor creates uninterpretable trace
ok late merger into QRed DegP
unrestricted trace works fine
(but why no head-mvt constraints?)

Bhatt & Pancheva ms. 2002

- (26) Mary climbed higher than 1000 feet before you did.
(27) *Mary climbed higher before you did than 1000 feet.

Background:

- (28) I read every book that John had recommended before you did.
(a) 'I read every recommended book before you read every recommended book'
(b) 'for every recommended book, I read it before you read it'
- (29) I read every book before you did that John had recommended.
(a) * (unavailable)
(b) ok (only reading)
- (30) Auxiliary assumption ("Kennedy's Generalization"):
Every quantifier that has the trace of DegP in its scope also has DegP itself in its scope.
- (31) John read more books than Mary published in her life before you did.
(a) '... before you read more books than Mary published'
(b) '... before you read them'
- (32) John read more books before you did than Mary published in her life.
'... before you read them' (only reading)

¹ This prediction seems to conflict with B&P's section 1.1.3 (ex's (9)).

- (33) ?? I will tell him_i a sillier rumor than Mary told John_j.
- (34) I will tell him_i a sillier rumor tomorrow than Mary told John_j.
- (35) Auxiliary assumption (see Fox 2002):
Parsing preference against late merger that is string-vacuous and semantically vacuous.

Where exactly is the 'than' clause merged then in (33)? At the edge of the *rumor*-NP?

- (36) Her father tells her_i to work harder than Mary_j's boss tells her to (work).
a. * he tells her: "Work harder than your boss tells you to work!"
b. the amount of work he demands is more than the amount the boss demands

compare:

- (37) Her father tells Mary_i to work harder than her_j boss tells her to (work).
both readings a. and b. okay

- (38) Her father tells her_i to work harder than Mary_j's boss does.
a. * he tells her: "Work harder than your boss works!"
(b. * he tells her: "Work harder than your boss tells you to work!")
c. the amount of work he demands is more than her boss works
d. the amount of work he demands is more than the amount the boss demands

compare:

- (49) Her father tells Mary_i to work harder than her_j boss does.
all except b. available