

"On Wh-Movement"

1. Wh-movement

Some ideas circa 1976:

- (1) **SSC/PIC**
No movement rule may involve X and Y in
 $\dots X \dots [\alpha \dots Y \dots] \dots X \dots$

where α contains a [subject that c-commands Y] or is "propositional".
 - (2) **the COMP escape hatch**
... where Y is not in COMP [of α].
 - (3) **Free deletion in COMP:**
wh-phrase becomes null
that becomes null
for becomes null
 - (4) **Doubly-Filled COMP filter**
Only one of *wh* or C may occupy COMP.
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- (5) **Two Movement Rules**
 - a. Move NP. [φ-features!]
 - b. Move *wh*-phrase. [*wh*-features!]
 - (6) **The rule of *wh*-movement has the following general characteristics:**
 - a. it leaves a gap
 - b. where there is a bridge, there is an apparent violation of subadjacency, PIC, and SSC
 - c. it observes CNPC
 - d. it observes *wh*-island constraints [(49)]
 - (7) **Goal of the paper:**
"Where we find the configuration [(6)] in some system of data, can we explain it on the assumption that the configuration results from *wh*-movement?"
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2. Comparatives

- In the literature at the time: perhaps the gap arises from *deletion*.
 - But comparatives show the stigmata of (AP) *wh*-movement.
- (8) **Over *wh*-word may show up**
 - a. John is taller than (what) Mary is.
 - b. John is taller than (what) Mary told us that Bill is. [(51)]
 - (9) **Shows bridge/non-bridge and other island contrasts**
 - a. Mary isn't the same as [she was five __ years ago]
 - b. Mary isn't the same as [John believes [that Bill claimed [that she was __ five years ago]]]
 - c. *Mary isn't the same as [John believes [Bill's claim [that she was __ five years ago]]]
 - d. *Mary isn't the same as [I wonder [whether she was __ five years ago]] [(52)]
 - (10) **Strong crossover in comparatives** (Bresnan 1975)
 - a. More students_{*i*} flunked than __ thought they_{*i*} would flunk.
 - b. *More students_{*i*} flunked than they_{*i*} thought __ would flunk.
 - (11) **Analysis:**
More students flunked than [*wh*-many students [.... gap...]]

Note: the examples are complicated by
 1. extraposition of the comparative clause; and
 2. non-obvious semantics
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3. Topicalization

- Is Topicalization just like left-dislocation?
- (12) **Left-dislocation**
 - a. This book, I think you should read it.
 - b. As for this book, I think you should read it.
 - No! Left-dislocation does not look like movement, but topicalization does.
 - (13) **Topicalization shows bridge/non-bridge and other island contrasts**
 - a. This book, I really like.
 - b. This book, I asked Bill to get his students to read.
 - c. *This book, I accept the argument that John should read.
 - d. *This book, I wonder who read.

- (14) **...unlike Left dislocation**
 c. As for this book, I accept the argument that John should read it.
 d. This book, I wonder who read it.
- (15) **Some Phrase Structure rules**
 a. S" -> TOP S'
 b. S' -> COMP S
 c. S' -> COMP S"

Consequences:

- Topic recursion allowed by rules (a) and (c).
- The S' introduced by rule (a) could be a *wh*-clause. This yields the Topicalization construction if we propose that *wh*-deletion is *obligatory* here.
- When it is not a *wh*-clause, it is Left Dislocation.

Tacit Assumption: S' but not S" may be subcategorized.

- (16) **Cleft sentences show bridge/non-bridge and other island contrasts**
 a. It is this book that I really like.
 b. It is this book that I asked Bill to get his students to read.
 c. *It is this book that I accept the argument that John should read
 d. *It is this book that I wonder who read
- (17) **Analysis of clefts:**
It is S".
 Stipulation:
 (i) the S' must show *wh*-movement;
 (ii) COMP (for some speakers) must not become "terminally null"
- (18) **Pseudo-clefts**
 a. This book is what I really like.
 b. This book is what I asked Bill to get his students to read.
etc.
- (19) **Analysis of pseudo-clefts**
 NP is S'

4. Indirect Questions and Relative Clauses: finite and infinitival

- The point: S' comes in both finite and non-finite flavors

Questions

- (20) **Finite indirect questions show bridge/non-bridge and other island contrasts**
 a. I wonder [who John saw].
 b. I wonder [who John believed [that Mary would claim [that Bill would visit t₁]].
 c. *I wonder [who John believed [the claim [that Bill would visit]]].
 d. *Who₂ did you wonder [who₁ t₁ saw t₂].
- (21) **Infinitival indirect questions show bridge/non-bridge and other island contrasts**
 a. I wonder [who to see].
 b1. I wonder [who to order Mary [to promise [to visit]]].
 b2. I wonder [who to persuade Mary [that she should promise [to visit]]]
 c. *I wonder [who to insist on [the principle [that Bill should visit]]].
 d. *Who₂ do you wonder [what₁ to give t₁ to t₂]
 *What₂ do you wonder [[to whom]₁ to give t₂ t₁]

- Note: The impossibility of an overt subject for the infinitives in (21) was a mystery for 1976 syntax. Case theory lay 2-3 years in the future.

Finite Relative clauses

- (22) **Finite relative clauses: bare *wh***
 a. *the person [whom that I met ___] **wh-that*
 b. the person [whom I met ___] *ok wh*
 c. the person [that I met ___] *ok that*
 d. the person [I met ___] *ok zero*
- (23) **Finite relative clauses: PP pied-piping**
 a. *the person [with whom that Mary spoke ___ at the party] **wh-that*
 b. the person [with whom Mary spoke ___ at the party] *ok wh*
 c. *the person [that Mary spoke ___ at the party] **that*
 d. *the person [Mary spoke ___ at the party] **zero*

Non-Finite Relative clauses

- (24) **Infinitival indirect questions show bridge/non-bridge and other island contrasts**
 a. I found a book for you to read t
 b. I found a book for you to arrange for Mary to tell Bill to give t to Tom
 c. I found a book for you to insist that Bill should read t
 d. I found a book for you to insist that Bill tell Mary that Tom should read t
 e. *I found a book for you to insist on the principle that Tom should read t
 [f. *Who did he find a book t to read]

• **Stipulation:**

Deletion of *wh* is obligatory in infinitival relatives, except when deletion is *non-recoverable* [p. 98]

- (25) **Infinitival relative clauses: bare *wh* (oblig. deletion of *wh*)**
 a. *a person [whom for Mary to invite __ to the party] **wh-for*
 *a person [whom for PRO to invite __ to the party]
 b. * a person [who Mary to invite __ to the party] **wh*
 *a person [who PRO to invite __ to the party]
 c. **a person [for Mary to invite __ to the party]** *ok for*
 *a person [for PRO to invite __ to the party]
 d. *a person [Mary to invite __ to the party] *ok zero*
 a person [PRO to invite __ to the party]
- (26) **Infinitival relative clauses: pied-piped PP (*wh* ok)**
 a. *a person [with whom for Mary to speak __ to the party] **wh-for*
 *a person [with whom for PRO to speak __ to the party]
 b. * a person [with whom Mary to speak __ to the party] *ok wh*
 a person [with whom PRO to speak __ to the party]
 c. *a person [for Mary to speak __ to the party] **for*
 *a person [for PRO to speak __ to the party]
 d. *a person [Mary to speak __ to the party] **zero*
 *a person [PRO to speak __ to the party]

5. Tough-constructions

- (27) a. It is easy (for us) to please John
 b. John is easy (for us) to please.

• Movement or deletion? Where does the subject get its θ -role from?

- (28) **θ -role from downstairs?**
 *John is easy to please Mary.

- (29) **Movement?**
 a. %Close tabs are easy (for us) to keep on Bill.
 b. %Headway is easy (for us) to make in this car.

but: c. *There is easy (for us) to believe __ are multiple solutions to the problem.
compare: d. %The planet is easy (for us) to believe __ exists.

- (30) **Tough constructions show bridge/non-bridge and other island contrasts**
 a. John is easy (for us) to please t
 b. (i) John is easy (for us) to convince Bill to do business with t
 (ii) John is easy (for us) to convince Bill to arrange for Mary to meet t
 c. John is easy (for us) to convince Bill that he should meet t
 d. John is easy (for us) to convince Bill to tell Mary that Tom should meet t
 e. (i) *John is easy (for us) to convince Bill of the need for him to meet t
 (ii) *John is easy (for us) to describe to Bill a plan to assassinate t
 f. (i) *what₂ is John fun (for us) [(who₁) to give t₂ to t₁]
 (ii) *who₂ are the presents fun (for us) [(which₁) to give t₁ to t₂]
 (iii) *[to whom]₂ are the presents fun (for us) [(which₁) to give t₁ t₂]

"In short, the basic properties of easy-to-please constructions follow directly from the assumptions we have already made, assuming that here too *wh*-movement is crucially involved. The latter assumption is particularly natural in this case, since we have analogous forms **in** which the *wh*-phrase may directly appear...

- (31) John is an easy person to please.
 (32) a. this is an easy violin on which to play sonatas
 b. this is a pleasant room in which to work

"Whatever the correct analysis of these structures may be, it seems clear that they involve, at some level, a phrase such as (33), as an adjectival modifier:

- (33) a. easy - on which to play sonatas (violin)
 b. pleasant - in which to work (room)