

The Minimalist Theory of Syntax:
Motivations and Prospects

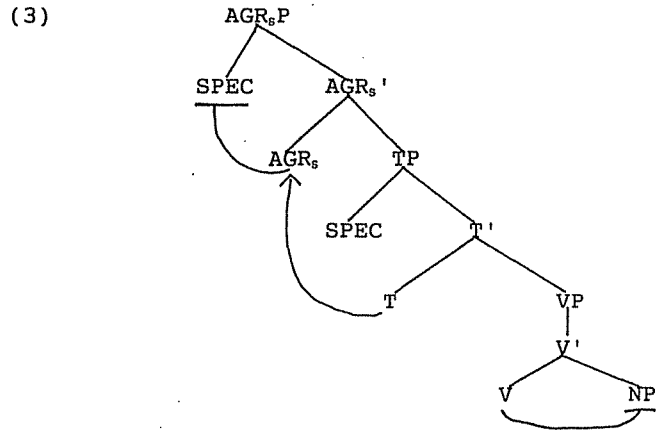
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- (1) DS(?)
SS(?)

PF LF

I. Levels of Representation: Case considerations

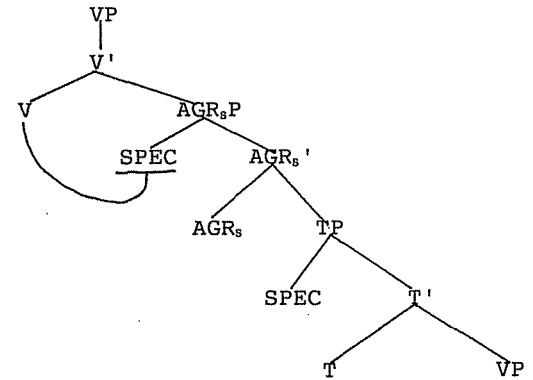
- (2) John saw Mary



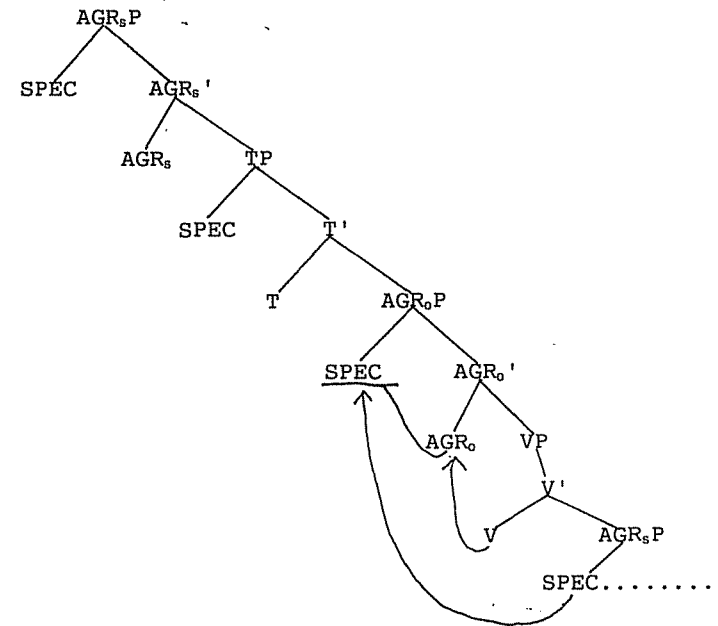
- (4) T raises to AGR_s and, when T is finite, the combination licenses nominative Case in SPEC of AGR_s.

- (5) John believes Mary to be intelligent

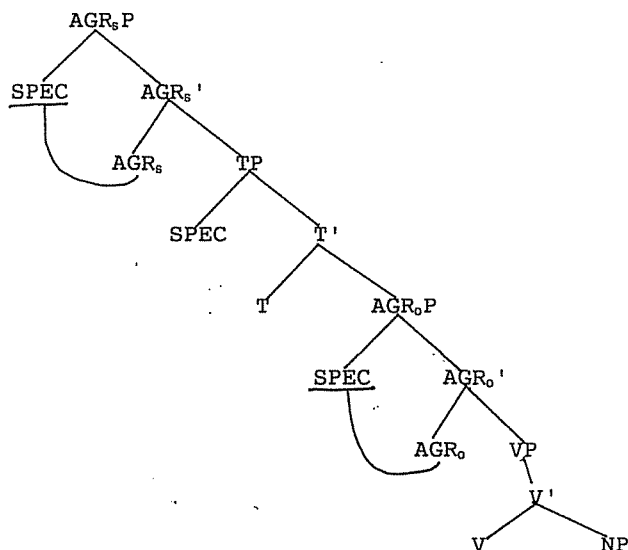
- (6)



- (7)



(8)



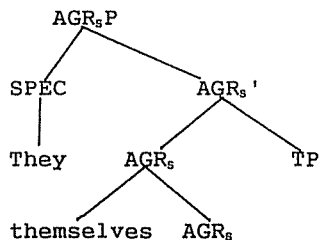
(9) V raises to AGR_o, and, when V is accusative, the combination licenses accusative Case in SPEC of AGR_o.

(10) The Case feature of an NP must be licensed via SPEC-head agreement. An NP with an unlicensed Case feature is an ill-formed LF object. A-movement is driven by the need for the Case feature to be licensed (one aspect of 'Economy of Derivation').

II. SPEC of AGR_o: Further Arguments

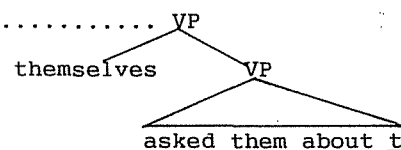
(11) They injured themselves

(12)

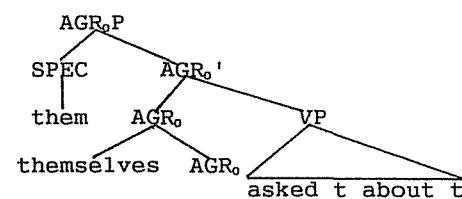


(13) I asked them about themselves

(14)



(15)



(16) Jack believed John to be famous

(17) Jack believed that John is famous

(18) John was believed to be famous by Jack

(19)a *Jack_i believed him_i to be famous

b Jack_i believed himself_i to be famous

(20) They believed each other to be famous

(21) The FBI proved that few students were spies

(22) The FBI proved few students to be spies

(23) *He_i thinks Bob_i is a genius

(24) Condition C: An R-expression must be (A-)free.

(25) Joan believes he_i is a genius even more fervently than Bob_i does

(26) *Joan believes him_i to be a genius even more fervently than Bob_i does

(27) ?The DA proved [the defendants to be guilty] during each other's trials

(28) ?The DA accused the defendants during each other's trials

(29) ?*The DA proved [that the defendants were guilty] during each other's trials

(30) No one saw anything

(31) *Anyone saw nothing

(32) The DA accused none of the defendants during any of the trials

(33) ?The DA proved [none of the defendants to be guilty] during any of the trials

(34) ??The DA proved [that none of the defendants were guilty] during any of the trials

- (35) I showed John himself (in the mirror)
- (36) *I showed himself John (in the mirror)
- (37) I showed the professors each other's students
- (38) *I showed each other's students the professors
- (39) I denied each worker, his, paycheck
- (40) *I denied its, owner each, paycheck
- (41) I gave each trainer the other's lion
- (42) *I gave the other's trainer each lion
- (43) I gave no one anything
- (44) *I gave anyone nothing

- (45) The 1st object in a double object construction has its Case licensed in the 'standard' way, i.e., by raising to SPEC of AGR₀.

III. The 'Extended Projection Principle'

- (46) *has been arrested John
- (47) John has been arrested
- (48) The police have arrested John
- (49) *The police have John arrested
- (50) The 'Extended Projection Principle'. A Case asymmetry still seems to remain.
- (51) 'Procrastinate'. Delay performing a necessary operation until LF, except to prevent a PF violation.
- (52) By licensing Case, the relevant feature of a head is discharged and disappears.
- (53) Finite Tense in English has a 'strong' NP licensing feature. A strong feature (or a functional head containing one) is an ill-formed PF object.
- (54) *John is believed was arrested (Out by Economy: John was already in a position where its Case was licensed. Note that this derives many ECP and Condition A effects. Is this an instance of undesirable 'redundancy'?)
- (55) *I believe to have been arrested John
- (56) I believe John to have been arrested
- (57) Apparently, even non-finite Tense in English has a strong feature to discharge, or Procrastinate would block (56). The feature is not, however, a Case feature. Given the parallelism between direct object and ECM subject, we deduced that John raises to SPEC of AGR₀. But Economy would prevent this if embedded subject position in an ECM construction were a Case position. The precise nature of the feature remains to be determined.

IV. Case and Expletives

- (58) There is [_a a strange man] in the garden
- (59) "In [(58)] α is not in a proper position for Case checking; therefore it must raise at LF, adjoining to the LF affix there..." Chomsky (1992)
- (60) A technical inconsistency: In (58), Tense must check the Case of there in overt syntax, or the derivation will crash at PF. Further, this checking results in the disappearance of the relevant feature of Tense. But this means that the feature is no longer available to check the Case of [_a a strange man] when that expression adjoins to there in the LF component.
- (61) Tentative conclusion: The Case of α in (19) is licensed some other way, not by raising to there. How?
- (62)a There is/*are a man in the garden
b There are/*is men in the garden
- (63) *There is believed that a man is in the garden
- (64) Apparently α does raise to there. Why?
- (65) There is an LF affix. A free-standing affix is an ill-formed object.
- (66)a There is a man here
b *There is every man here
c *There is the man here
- (67) The LF host of there must be a 'partitive' Case marked NP. Be and unaccusatives license 'partitive' Case.
- (68) *There seems to [_a a strange man] [that it is raining outside]
- (69) Either partitive Case is inherent (and therefore licensed in situ?) or structural and licensed in SPEC of AGR₀.

V. The Problem of Apparent S-Structure Requirements

A. Condition C

- (70) Which book that John_i read did he_i like
- (71) *He_i liked every book that John_i read
- (72) *Who said the he_i liked which book that John_i read

B. Condition A

- (73) John_i wonders which picture of himself_i Mary showed to Susan
 (74) *John_i wonders who showed which picture of himself_i to Susan
 (75) John_i said that every picture of himself_i, Mary likes
 (76) *John_i said that Mary likes every picture of himself_i,
 (77) If the general program is correct, either there is no QR, or QR raises just the quantifier head, and not the entire quantificational expression. Similarly for LF WH-movement.
 (78) The DA proved [two men to have been at the scene] during each other's trials
 (79) *The DA proved [there to have been two men at the scene] during each other's trials

C. Negative Polarity Licensing

- (80) Some politician is likely to address John's constituency
 (81) It is likely that some politician will address John's constituency
 (82) It is unlikely that anyone will address the rally
 (83) *Anyone is unlikely to address the rally
 (84) Someone is unlikely to address the rally

VI. Some Properties of LF: Do Quantifiers Raise?

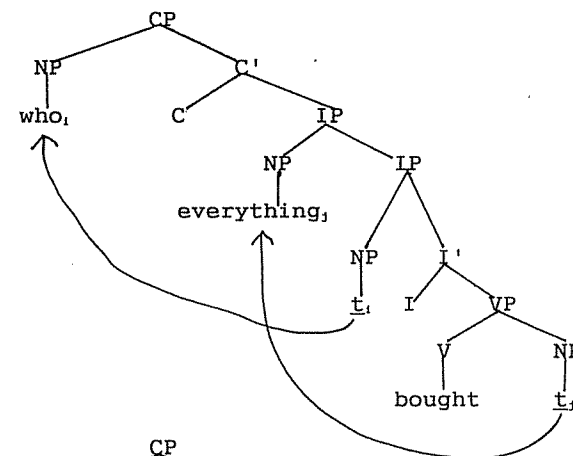
A. Weak Crossover

- (85) ?*Who_i does his_i mother love t_i
 (86) ?*His_i mother loves everyone_i
 (87) [everyone_i], [[his_i mother] loves t_i]
 (88) What did you buy
 (89) you bought WH-something
 (90) WH [you bought _-something]
 (91) WH [everyone bought _-something]
 (92) WH [[his_i mother] loves _-someone_i]

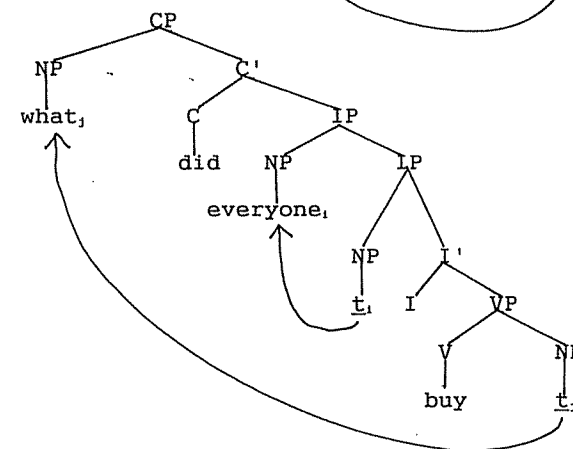
B. WH - Quantifier Interactions

- (93) What did everyone buy (ambiguous)
 (94) Who bought everything (unambiguous)
 (95) Who saw everyone (unambiguous)

(96)



(97)



The diagram illustrates the syntax tree for the sentence "Who bought everything?". The root node is CP, which branches into NP (containing "who_i") and C'. C' branches into C (empty) and IP. IP branches into NP (containing "t_i") and I'. I' branches into I (empty) and VP. This VP branches into NP (containing "everything_j") and another VP. The second VP branches into V (containing "bought") and NP (containing "t_j"). Two curved arrows indicate movement: one from "t_i" to "who_i" and another from "t_j" to "everything_j".

- ### C. Antecedent Contained Deletion

- (109) John read everything Bill did
(110) John [_{VP} read everything Bill did [_{VP}e]]
 read everything Bill did [_{VP}e]
(111) [everything [Op_i Bill did [_{VP}e]]]_i [John [_{VP} read t_i]]
 [_{VP} read t_i]

(112) Dulles suspected everyone Philby did
(113) Dulles suspected everyone Angleton said Philby did
(114) ?*Dulles suspected everyone Angleton wondered why Philby did
(115) Who did Angleton say Philby suspected
(116) ??Who did Angleton wonder why Philby suspected

(117) ?*Dulles suspected everyone that Angleton believed the
claim that Philby did
(118) ??Who did Angleton believe the claim that Philby suspected

(119) ??What_i do you wonder [whether [John read t_i]]
(120) *Why_i do you wonder [whether [John read the book t_i]]
(121) ??What do you wonder whether John said Mary read
(122) *Why do you wonder whether John said Mary read the book

(123) Lasnik and Saito (1992): γ -marking is at levels. Since
no principle demands their presence at S-structure, adjunct
traces must not be present at that level.

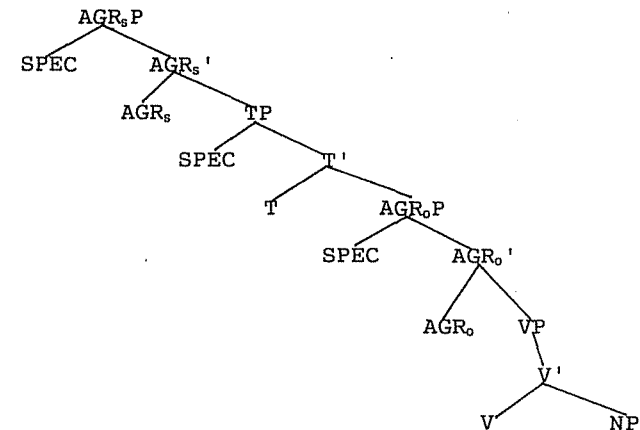
(124) Chomsky: Economy of representation and derivation.
(i) LF and PF representations must be minimal,
containing only ('morphologically') well-formed
objects.
(ii) Derivations are driven exclusively by
considerations of (i).
(125) LF 'chains':
(i) A-chains (passive, raising, etc.). The moved NP
and its traces are all in A-positions.
(ii) X⁰-chains (verb raising to INFL, INFL raising to
COMP, etc.). The moved head and its traces are all in
head positions.
(iii) Adjunct chains. The moved adjunct and its traces
are all in A-bar positions.
(iv) Operator-(argument)variable chains. The moved
operator and all intermediate traces are in A-bar
positions; the initial trace is in an A-position.

(126) 'Uniform' chains are well-formed, so, by (124)ii, trace
deletion is not permitted. Operator-variable pairs
constitute well-formed objects, so any intermediate traces
must, hence may, be deleted.

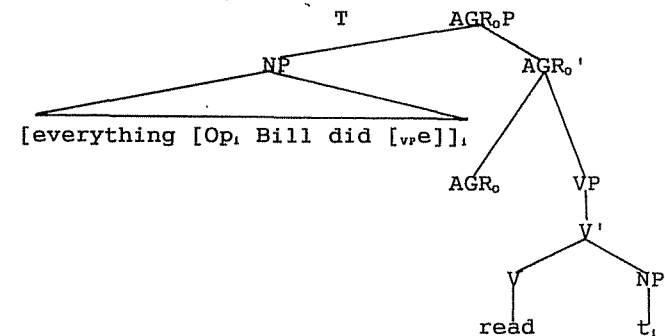
(127) Subjacency is therefore a constraint on Move *a*, and not
(solely) a filter on LF representations. The intermediate
traces of wh-movement of an argument must be deleted, thus
obliterating the representational difference between normal
successive-cyclic movement and movement out of an island.

- (128) Might ellipsis involve PF deletion? ACD constructions would then involve 'overt' movement of an operator, followed by deletion in the PF component. But the infinite regress problem remains, in slightly altered form: infinite underlying structure instead of infinite LF.
- (129) Wyngaerd and Zwart extension of Fiengo and May's 'Vehicle Change' as a possible solution.
- (130) John scratched his arm and Mary did too
- (131) I turned in my assignment, but most of the other students didn't [turn in their assignments]
- (132) Cheryl stops to look at any pretty flower she stumbles onto, and I do too
- (133) [_{VP} suspected everyone Angleton did [_{VP} e]]
- (134) [_{VP} suspected t]
- (135) A significant problem remains. If ACD is now just an instance of ordinary VP ellipsis, and since the latter is so free in its distribution, we would expect there to be no constraints on the latter, apart from those attributable to the movement of the relative operator, as in the Subjacency effects considered above.
- (136) Dulles suspected everyone Angleton did
- (137) *Dulles suspected Philby, who Angleton did
- (138) ?Dulles suspected Philby, who Angleton did not
- (139) ?Dulles suspected Philby, who Angleton did as well
- (140) ?*Dulles suspected Philby, and Angleton did
- (141) Dulles suspected Philby, and Angleton did not
- (142) Dulles suspected Philby, and Angleton did as well
- (143)a ?John believed everyone you did ____ to be a genius
b *John believed (that) everyone you did ____ was a genius
- (144)a ?I expect everyone you do ____ to visit Mary
b *I expect (that) everyone you do ____ will visit Mary
- (145)a ?I find everyone you do ____ to be qualified
b *I find (that) everyone you do ____ is qualified
- (146)a ?I predicted no one you did ____ to be a liar
b *I predicted (that) no one you did ____ has been a liar
- (147) I expect that everyone you expect will visit Mary will visit Mary
- (148) John expects that everyone Bill invites will visit Mary, and I expect that everyone you do [invite] will visit Mary

(149)



(150)



- (151) Who thought that Fred read how many of the books that Bill did
- (152) Who thought that Fred read how many of the books that Bill read
- (153) Who thought that Fred read how many of the books that Bill thought he had read
- (154) ?Dulles suspected Philby, who Angleton did not
- (155) ?Dulles suspected Philby, who Angleton did as well
- (156) Philby, who Angleton suspected, is likely [t to defect]
- (157) ?Dulles spoke to Philby, who Angleton did not
- (158) ?Dulles spoke to Philby, who Angleton did as well
- (159) Philby was spoken to
- (160) I spoke to the men on each other's birthdays

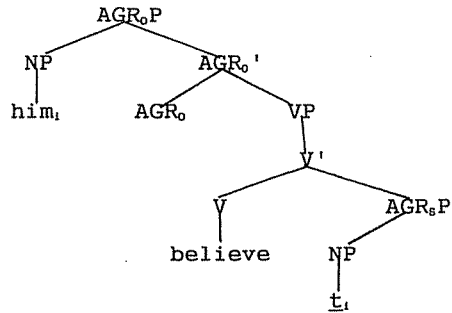
- (161)a ?Dulles talked about Philby, who Angleton did not
 b ?Dulles talked about Philby, who Angleton did as well
 c Philby was talked about
- (162)a *Mary stood near Susan, who Emily did not
 b *Mary stood near Susan, who Emily did as well
 c *Susan was stood near (by Mary)
- (163) *She stood near the buildings during each other's repairs
- (164) Dulles spoke to everyone Angleton did
 (165) Dulles talked about everyone Angleton did
- (166) ?Mary stood near everyone Emily did
- (167) A man arrived who was wearing a red hat
 (168) ?*John arrived who was wearing a red hat
- (169) ?John believed everyone you did ____ to be a genius
- a
 (170)b I visited a man $\left\{ \begin{smallmatrix} \text{who} \\ \text{that} \\ \emptyset \end{smallmatrix} \right\}$ John mentioned recently
 c
- a
 (171)b I visited a man recently $\left\{ \begin{smallmatrix} \text{who} \\ \text{that} \\ ?*\emptyset \end{smallmatrix} \right\}$ John mentioned
 c
- (172) ?Mary stood near a woman yesterday who was distributing leaflets
- (173) Mary [_{VP} [_{VP} stood near everyone] [_{CP} Op [Emily did [_{VP} e]]]]
- (174) Mary [_{VP} [_{VP} stood near everyone] [_{CP} Op [Emily (did) [_{VP} stood near everyone]]]]
- (175) everyone [_{IP} Mary [_{VP} [_{VP} stood near t] [_{CP} Op [Emily (did) [_{VP} stood near t]]]]]
- (176) Mary wondered which pictures of himself Bill saw
 (177) Mary wondered [_{wh-} which picture of himself] [Bill saw [_{wh-} which picture of himself]]
- (178) Mary mentioned the pictures of himself that Bill saw
 (179) Mary mentioned the pictures of himself that Bill saw the pictures of himself

VIII. More on Reconstruction

- (180) John wondered which picture of himself Bill saw

- (181)a John wondered [_{wh-} which picture of himself] [Bill saw [_{wh-} which picture of himself]]
 b John wondered [[which picture of himself] [_{wh-} t]] [Bill saw [[which picture of himself] [_{wh-} t]]]
 c John wondered [which [_{wh-} t picture of himself]] [Bill saw [which [_{wh-} t picture of himself]]]
- (182) ??Which claim that John_i was asleep was he_i willing to discuss
 (183) ??Which picture of Tom_i does he_i like
- (184) 'Reconstruction' is preferred: Try to minimize the restriction in the operator position.
- (185) The claim that John_i was asleep seems to him_i [t to be correct]
 (186) This picture of Tom_i seems to him_i [t to be ugly]
- (187)a Pictures of himself seem to Tom [t to be ugly]
 b [Pictures [t of himself]] seem to Tom [[pictures [t of himself]] to be ugly]
- (188) *Himself seems to Tom [t to be ugly]
- (189)a Pictures of himself strike John as ugly
 b *Himself strikes John as ugly
- (190)a ?Pictures of any athletes don't seem to be on sale
 b *Any pictures don't seem to be on sale
- #### IX. The PRO Theorem Reconsidered
- (191) If Case is checked (only) in SPEC-head configurations with appropriate functional heads, is the notion 'government' necessary in the theory?
- (192) A. An anaphor must be bound in its governing category.
 B. A pronominal must be free in its governing category.
- (193) The governing category for α is the minimal XP containing α , a governor of α , and ...
- (194) *John believes himself is clever
 (195) John himself believes [t is clever]
- (196) Might all Condition A effects reduce to constraints on the (LF) movement of an anaphor?
- (197) *John_i believes [him_i to be clever]
 (198) If government is not relevant to the characterization of governing category, what makes the governing category of him in (197) the matrix clause?

(199)



- (200) PRO must be ungoverned.
 (201) PRO must be unCase-marked.
 (202) PRO must be the subject of (certain) non-finite clauses.
 (203) PRO must be Case-marked (with 'null' Case.)
 (204) *It was arrested PRO
 (205) *I believe [PRO to be clever]
 (206) *My belief [PRO to be clever]
 (207) *I believe sincerely [John to be the best person]
 (208) Who do you believe sincerely [t to be the best person]
 (209) John is believed [t to be noisy]
 (210) *John is preferred [t to be noisy]
 (211) John is likely [t to be noisy]
 (212) *John is illegal [t to be noisy]
 (213) John is believed [_{IP} t to be noisy]
 (214) *John is preferred [_{CP} [_{IP} t to be noisy]]
 (215) [_{CP} Who will [_{IP} you see t]]
 (216) *John seems [t is crazy]
 (217) *John seems to t [that Mary is crazy]
 cf. It seems to John that Mary is crazy
 (218) *John strikes t [that Mary is crazy]
 cf. It strikes John that Mary is crazy
 (219) *He strikes that Mary is crazy
 (220) It is rare for it to strike John that Mary is crazy
 (221) *It is rare for John to strike t that Mary is crazy
 (222) It is rare for it to seem to John that Mary is crazy
 (223) *It is rare for John to seem to t that Mary is crazy
 (224) *It is rare PRO to strike t that Mary is crazy
 (225) *It is rare PRO to seem to t that Mary is crazy
 (226) John tried to be courageous, and Mary tried to also
 (227) I want John to be courageous, and I want Mary to also

- (228) ?*I believe John to be courageous, and I believe Mary to also
 (229) ?*John is believed to be courageous, and Mary is believed to also
 (230) ?John is likely to be courageous, and Mary is likely to also
 (231) *John said he was likely to solve the problem, and he is likely to
 (232) *John said there was likely to be a solution, and there is likely to
 (233) How likely to solve the problem is John
 (234) *How likely to be a solution is there
 (235) *[How likely [t to be a solution]] is there
 (236) John told Mary_i [PRO_i to leave]
 (237) John told Mary_i about herself_i
 (238) *John_i told Mary [PRO_i to leave]
 (239) John_i told Mary about himself_i
 (240) Jan_i opowiadał Marii_j o swoim ojcu
 John telling Mary about self's father
 (John was telling Mary about his father)
 (241) *Jan_i opowiadał Marii_j o swoim ojcu
 John telling Mary about self's father
 (John was telling Mary about her father)
 (242) Jan_i kazał Marii_j [PRO_i napisac' artykuł]
 *John told Mary write article
 (John told Mary to write an article)