

LSA Institute

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How to Evade Moving Violations

LSA.208

Howard Lasnik
University of Maryland
lasnik@umd.edu

Section 1
Strong Features, Defective PF Objects, and Ellipsis

I. Pseudogapping

- (1) a If you don't believe me, you will \emptyset the weatherman
 - b I rolled up a newspaper, and Lynn did \emptyset a magazine
 - c Kathy likes astronomy, but she doesn't \emptyset meteorology
- Levin (1978)

(2) Not just deletion of V:

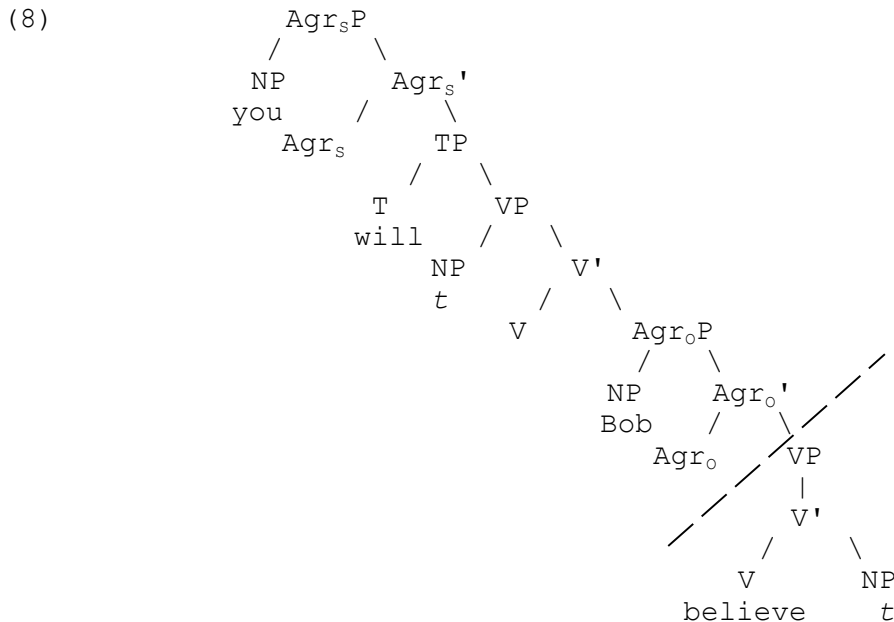
- (3) a The DA proved Jones guilty and the Assistant DA will ~~prove~~ Smith ~~guilty~~
- b ?John gave Bill a lot of money, and Mary will ~~give~~ Susan ~~a lot of money~~

(4) Pseudogapping as VP ellipsis, with the survivor rescued by moving out of the elided VP. {Jayaseelan, 1990 #279}

(5) You might not believe me but you will Bob

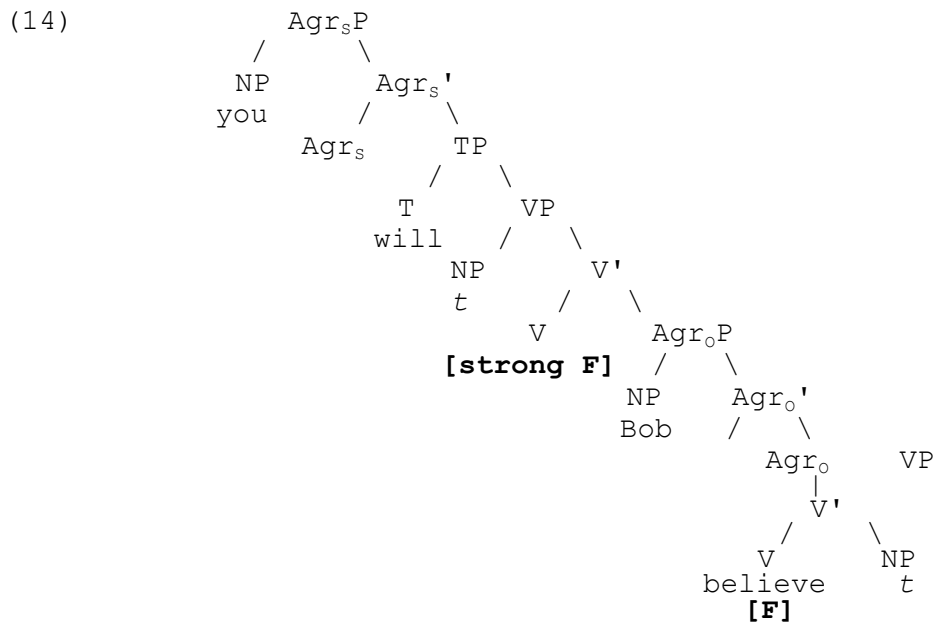
(6) NP-raising to Spec of Agr_o ('Object Shift') is overt in English. [Koizumi (1993), Koizumi (1995), developing ideas of Johnson (1991)]

(7) Pseudogapping as overt raising to Spec of Agr_o (rather than Jayaseelan's Heavy NP Shift) followed by deletion of VP. [Lasnik (1995b), {Lasnik, 1999 #707}]



(9) *You will Bob believe

- (10) "For the most part - perhaps completely - it is properties of the phonological component that require pied-piping. Isolated features and other scattered parts of words may not be subject to its rules, in which case the derivation is canceled; or the derivation might proceed to PF with elements that are 'unpronounceable,' violating FI." Chomsky (1995a, p.262)
- (11) "Applied to the feature F, the operation Move thus creates at least one and perhaps two "derivative chains" alongside the chain $CH_F=(F, t_F)$ constructed by the operation itself. One is $CH_{FF}=(FF[F], t_{FF[F]})$, consisting of the set of formal features $FF[F]$ and its trace; the other is $CH_{CAT}=(\alpha, t_\alpha)$, α a category carried along by generalized pied-piping and including at least the lexical item containing F. CH_{FF} is always constructed, CH_{CAT} only when required for convergence...As noted, CH_{CAT} should be completely dispensable, were it not for the need to accommodate to the sensorimotor apparatus." [p.265]
- (12) " Just how broadly considerations of PF convergence might extend is unclear, pending better understanding of morphology and the internal structure of phrases. Note that such considerations could permit raising without pied-piping even overtly, depending on morphological structure..." [p.264]
- (13) In (14), if only the attracted features raise, but the V does not raise, a PF crash will ensue, but only if the offending item exists at that level. Deletion provides another way to salvage the derivation. When the lower VP is deleted without the V having raised, a PF crash is avoided and the result is acceptable Pseudogapping.



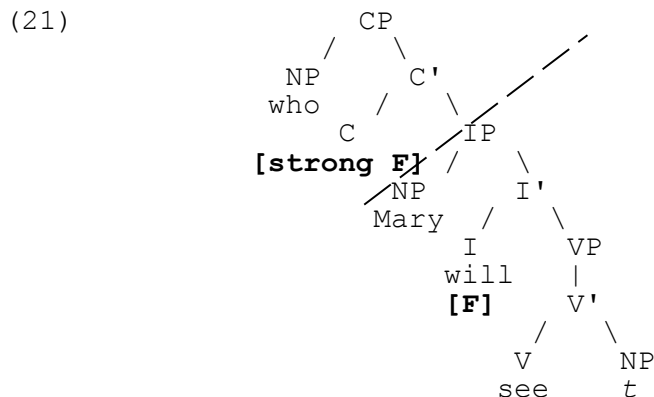
- (15) Once the matching feature of the lower lexical V is attracted, the lower V becomes defective (marked *, if you like). A PF crash will be avoided if either pied-piping or deletion of a category containing the lower V (VP Deletion = Pseudogapping in

the relevant instances) takes place. [Lasnik (1999b), developing the Ochi (1999) implementation of the Chomsky (1995a) proposal]

- (16) Note that it isn't easy to see how this result could be replicated if feature movement is eliminated from the theory in favor of long distance agreement - Agree, since Agree, unlike feature movement, never renders an item defective. [Lasnik (2002c)]

II. Sluicing 1 [Infl raising]

- (17) Sluicing - WH-Movement followed by deletion of IP (abstracting away from 'split Infl' details). [{Ross, 1969 #491} ,Saito and Murasugi (1990), Lobeck (1990)]
- (18) Speaker A: Mary will see someone.
Speaker B: I wonder who ~~Mary will see~~.
- (19) Ross described Sluicing as an embedded question phenomenon, but there is also matrix Sluicing:
- (20) Speaker A: Mary will see someone.
Speaker B: Who ~~Mary will see~~?

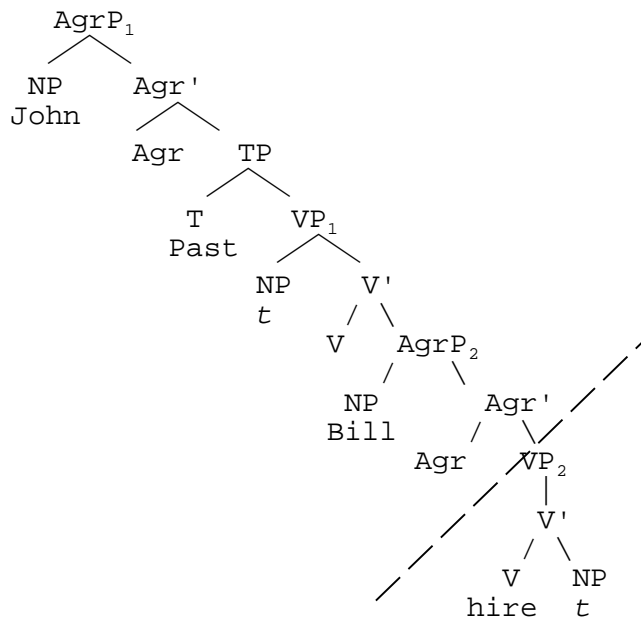


- (22) *Who Mary will see?
(23) Who will Mary see?
- (24) Assume that matrix interrogative C contains the relevant strong feature, with the matching feature of Infl raising overtly to check it. This leaves behind a phonologically defective Infl, which will cause a PF crash unless either pied-piping or deletion of a category containing that Infl (Sluicing) takes place.

III. Complementarity between movement and ellipsis? Sometimes, but not always.

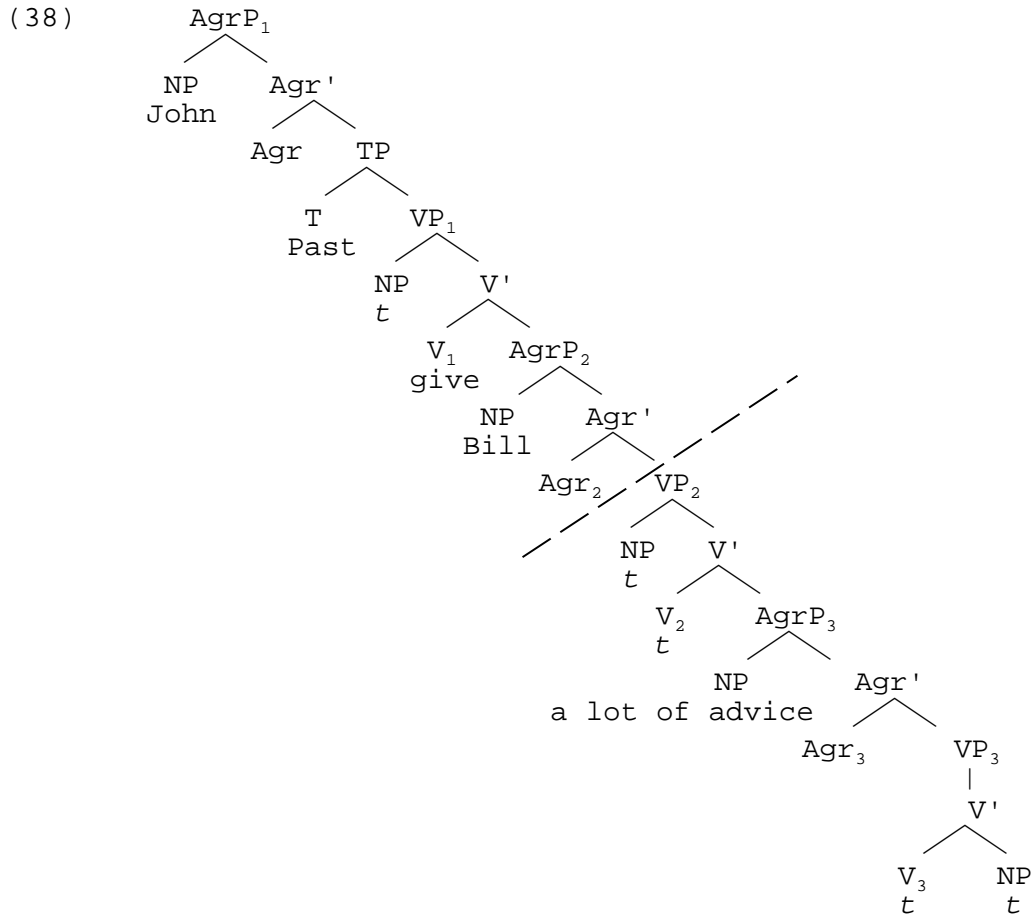
- (25) Mary will buy something.
(26)a What will she buy?
b What?
c *What will?

- (27) A possible economy account: Suppose ellipsis always involves strong feature movement, with the ellipsis licensing head attracting a feature of the (head of the) XP to be deleted. This leaves a phonologically defective item. The damage can be obliterated by ellipsis (or, potentially, repaired by head movement).
- (28) In (26)a, the 'repair' is by head movement of Infl to C. In (26)b, it is by IP deletion. Either suffices. But in (26)c, both operations have taken place.
- (29) Potential independent motivation for this kind of analysis of the complementarity (from Lasnik (1999c)):
- (30) Mary hired Susan, and John did ~~hire~~ Bill
- (31) *Mary gave Susan a lot of advice, and John gave Bill ~~a lot of advice~~
- (32) **Digression:** The simpler *Mary saw Susan and John saw too is ruled out independently, if, as I argued in several places, object shift is driven by an EPP requirement of Agr₀. If the lower NP is deleted along with the lower VP, then Agr₀ never has a specifier, violating the EPP. **End of digression.**
- (33) ... and John did ~~hire~~ Bill
- (34) Structure for 'standard' Pseudogapping, with VP₂ to be deleted:
- (35)



(36) ... and John gave Bill ~~a lot of advice~~

(37) Structure for ill-formed Pseudogapping, with VP₂ to be deleted:



(39) In the bad derivation (38), unlike the good derivation (35), V has raised out of the VP that will be deleted. This is just as predicted by (27)-(28).

(40) However, there is very strong evidence that V-raising is **not** incompatible with VP ellipsis.

(41) A number of languages with overt V raising to I nonetheless allow VP ellipsis, with the effect that everything in the VP except the V is deleted:

(42) Q: Salaxt et ha-yeladim le- beit-ha-sefer
 you-sent Acc the kids to school
 "Did you send the kids to school?"

A: Salaxti
 I sent
 "I did"

Hebrew Doron (1990)

- (43) A Martas deu um livro ao João? Sim, deu.
the Martha gave a book to- the John yes gave
"Did Martha give a book to John? Yes, she did."
Portuguese Martins (1994)
- (44) Q: Ar chuir tú isteach air
INTERR COMP put [PAST] you in on it
"Did you apply for it?"
A: Chuir
put [PAST]
"Yes."
Irish McCloskey (1990)
- (45) A possible interfering factor: These, and many languages with apparent V-raising and VP ellipsis also have null objects, at least in certain environments. However, standard tests indicate that VP ellipsis is, indeed, a possibility.
- (46) First, there are no 'null manner adverbials' in Serbo-Croatian, yet the second conjunct of (47) is interpreted with the adverbial.
- (47) Ivan piše rad pažljivo, a i njegov asistent piše
Ivan writes paper carefully and ('too') his assistant writes
"Ivan is writing a paper carefully, and his assistant is
(writing a paper carefully) too"
- (48) Second, the second conjunct of (49) can have a 'sloppy' reading.
- (49) Marko gradi sebi kucu, a i Marija gradi
Marko builds himself house and ('too') Marija builds
"Marko is building himself a house, and Maria is (building
herself a house) too"
Serbo-Croatian Adapted from Lasnik (1997)
- (50) As far as I know, these phenomena are general in all the relevant languages.
- (51) Even English evidently has certain instances of V-raising with VP ellipsis:
- (52) John was here and Mary was too
- (53) Interestingly, the phenomena that argued against the otherwise promising economy approach to (26)c and (31) also argue against another potential constraint on interaction between movement and ellipsis, one claimed to account for a particular gap in the VP ellipsis paradigm of English (and presented as an alternative to the account of Lasnik (1995d)). I turn to that now.

IV. A Gap in an ellipsis paradigm [Based on Lasnik (1997)]

A. Main verbs vs. auxiliaries

- (54) John slept, and Mary will too
- (55)a *John slept, and Mary will **slept** too
b John slept, and Mary will **sleep** too

- (56) **Hypothesis 1:** Any form of a verb V can be 'deleted under identity' with any form of V.
- (57) *John was here, and Mary will too [See Warner (1986)]
- (58)a *John was here and Mary will **was** here too
b John was here and Mary will **be** here too
- (59) **Hypothesis 2:** A form of a verb V can only be deleted under identity with the very same form. Forms of be and auxiliary have (finite ones, at least) are introduced into syntactic structures already fully inflected. Forms of 'main' verbs are created out of lexically introduced bare forms and independent affixes, as in Chomsky (1955).
- (60) John [Af] sleep, and Mary will ~~sleep~~ too

B. Motivation for the hybrid morphological account

- (61) Lasnik (1995d) proposes this morphological difference between main and auxiliary verbs in English to account for the fact that finite auxiliaries show the full range of raising effects (like all verbs in French), while main verbs in English show none of them. The proposal is that the English finite auxiliaries (and all finite verbs in French) are lexically introduced with inflectional features which must be checked against a functional head (or heads). English main verbs are lexically uninflected, so they don't raise.
- (62)a *John not left
b *John left not
- (63) Just as in Chomsky (1955) and Chomsky (1957), the process associating the finite affix with the bare verb ('Affix Hopping') requires adjacency.

V. An alternative treatment of the gap?

- (64) Note that in the crucial (57), the V (*is*) in the antecedent has raised to Infl. Thus:
- (65) "[_{VP} [_V e] X] cannot antecede VP-ellipsis." Roberts (1998)
- (66) "...a trace of verb movement cannot serve as part of a VPE antecedent." Potsdam (1996b)
- (67) We have seen overwhelming evidence that both (65) and (66) are too strong.
- (68) A weaker version of (65) (and perhaps what he actually intended):
- (69) [_{VP} [_V e] X] cannot antecede VP-ellipsis of [_{VP} [V] X].
- (70) "...a raised V has fewer features than a non-raised V, assuming that the features that cause raising are not copied (this has to be assumed in a minimalist framework or the raising operation would not eliminate features and so would have no motivation, and so would be impossible given the general last-resort nature of movement)." Ms. version of Roberts (1998)

- (71) But even the weakened (69) is still counterexemplified by Pseudogapping, where, recall, the V remains in situ in the ellipsis site but raises (at least potentially; more on this later) in the antecedent.
- (72) Further, if (65) or (69) is correct, it should generalize to all heads, not be limited to V and trace of V:
- (73) [_{YP} [_Y e] X] cannot antecede YP-ellipsis of [_{YP} [Y] X].
- (74) But now we find still more counterexamples, based on Sluicing:
- (75) Speaker A: Never will [_{IP} Harry t go to a linguistics lecture again]
Speaker B: Tell me why [_{IP} ~~Harry will never go to a linguistics lecture again~~]
- (76) Speaker A: Never will [_{IP} Harry t go to a linguistics lecture again]
Speaker B: Why [_{IP} ~~Harry will never go to a linguistics lecture again~~]
- (77) Speaker A: Never will [_{IP} Susan t understand some linguists]
Speaker B: Tell me which linguists [_{IP} ~~Susan will never understand~~]
- (78) Speaker A: Never will [_{IP} Susan t understand some linguists]
Speaker B: Which linguists [_{IP} ~~Susan will never understand~~]

VI. Why isn't Roberts' line of reasoning valid?

- (79) Given that a raised X⁰ has had a feature (or set of features) checked and deleted, why can it antecede the deletion of an XP with its head in situ (as in some occurrences of Sluicing and Pseudogapping)?
- (80) On my analysis of these constructions presented above, the X in situ **has** had its features raised and checked.
- (81) But now, the major prima facie counter-examples to the revised version of Roberts' proposal (73) are fully compatible with it.
- (82) So why not accept the (revised) Roberts account of the gap in the original ellipsis paradigm?
- (83) John slept, and Mary will too
- (84) *John was here, and Mary will too
- (85) John was here, and Mary will ~~be here~~ too
- (86) Here be does not raise at all, with or without pied-piping, whereas was obviously does raise, resulting in features being checked and deleted.
- (87) BUT what are those features? It is hard to see how they could be anything other than inflectional features. But checking and deleting the inflectional features of was makes it **more** like be, not **less** like be.

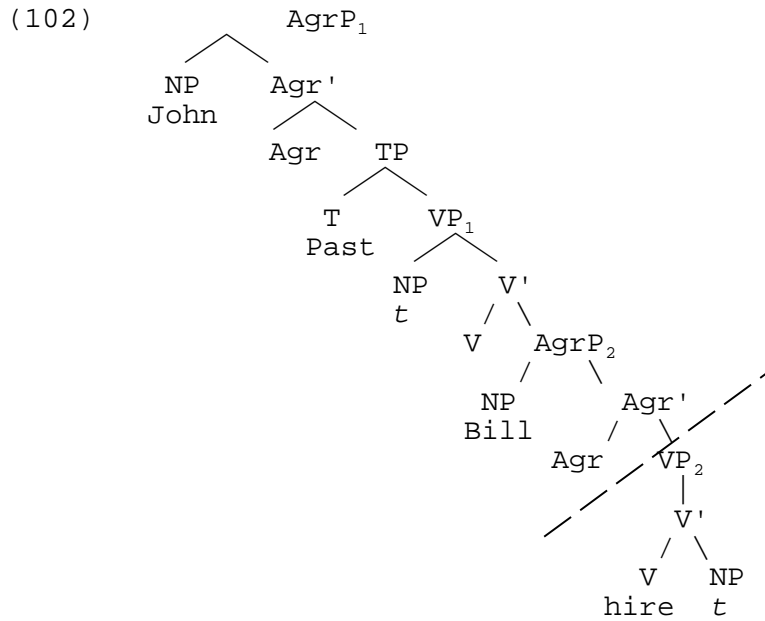
VII. Another kind of justification for (66)

- (88) [Under ellipsis] Corresponding X⁰ traces [unlike XP traces] must have the same binder in both the antecedent and target clauses. [This would not obviously explain the gap in the paradigm, even if correct.]
- (89) Chicken, she'll eat, but ostrich, she won't
- (90) Potsdam (1996a) claims that in Hebrew and Irish, both V-raising languages that have VP ellipsis, "the raised verbs in ellipsis antecedent and target clauses must be the same." He suggests that (88) is universal.
- (91) Q: dina soreget et ha- svederim Se- hi loveSet
Dina knits ACC the sweaters that she wears
"Does Dina knit the sweaters that she wears?"
A1: lo, aval ima Sela soreget
no, but mother hers knits
"No, but her mother does."
A2: lo, ima Sela kona (la)
no, mother hers buys (to-her)
"No, her mother buys them (for her)." Hebrew Doron (1990)
- (92) A1 is 'strict' or 'sloppy'. A2 is only strict.
- (93) Ivan piše rad pažldivo, a njegov asistent čita
Ivan writes paper carefully and his assistant reads
"Ivan is writing a paper carefully, and his assistant is reading it carefully." Serbo-Croatian
- (94) Marko gradi sebi kucu, a Marija kupuje
Marko builds himself house and Marija buys
"Marko is building himself a house, and Maria is buying herself a house."
- (95) Q: Does Dina knit the sweaters that she wears?
A: No her mother_i buys the sweaters that she_i wears
- (96) The putative answer (95)A is strikingly unresponsive to the question.
- (97) dina soret et ha-svederim Se- hi loveSet, be-?od ima Sela
kona
Dina knits the sweaters that she wears while mother hers
buys
- (98) Dina knits the sweaters that she wears while her mother buys
them
- (99) dina ohevet ko sveder Se- hi loveSet aval ima Sela
sonet
Dina loves every sweater that she wears but mother hers
hates
"Dina loves every sweater that she wears but her mother hates every sweater that she wears."

VIII. Back to the bad Pseudogapping example

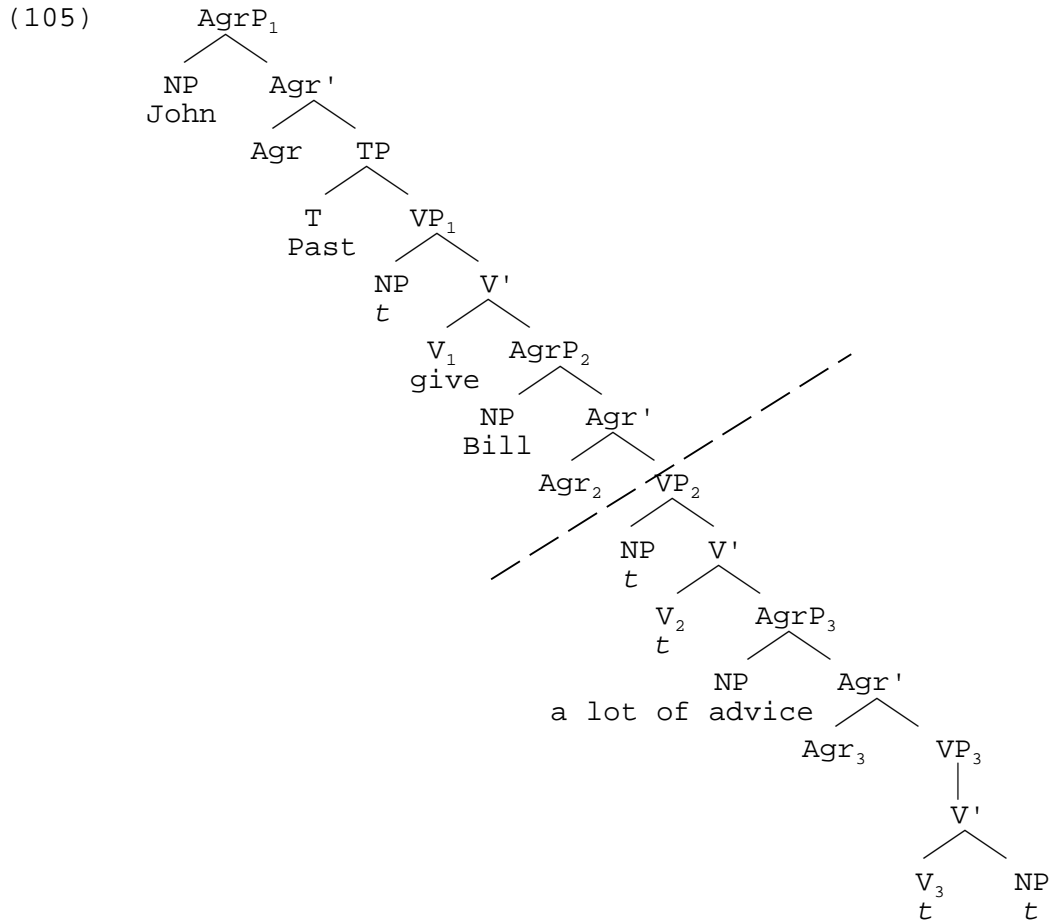
(100) ... and John did Bill

(101) Structure for 'standard' Pseudogapping, with VP₂ to be deleted:



(103) ... and John gave Bill ~~a lot of advice~~

(104) Structure for ill-formed Pseudogapping, with VP₂ to be deleted:



(106) In both (102) and (105), two maximal projections intervene between the 'licensing' head Past and the target VP, VP₂. However, in the acceptable (102) the intervening V head is empty, while in the unacceptable (105) the intervening V is the lexical verb give, which has raised from the lowest VP. I speculate that it is some version of relativized minimality that states this difference.

(107) As suggested earlier, suppose the head licensing VP ellipsis does so by attracting (in the sense of Chomsky (1995b)) a feature of the head of the VP. As a consequence of having 'lost' this feature, the VP would now be PF defective unless it deleted.

(108) Attraction seeks the nearest c-commanded item with a feature of the appropriate type. In standard simple VP ellipsis, that feature resides in the immediate complement of the licensing head.

(109) In the ill-formed (105), attraction has 'skipped' the V heading the complement of the licensing head and instead attracted a feature of the initial trace of that V, in violation of relativized minimality. Alternatively, a feature of the raised

lexical V has been attracted, but that V has not been deleted, resulting in a PF crash.

- (110) In the acceptable (102), even though hire is geometrically rather remote from the licensing Tense, there is no nearer V with a feature for Tense to attract, so, in the spirit of relativized minimality, it can attract a structurally distant feature.

IX. Back to the bad Sluicing example with Infl raising

(111) Mary will buy something.

(112)a What will she buy?

b What?

c *What will?

(113)a Assume that C is the licenser of Sluicing (IP ellipsis).

b Following Saito and Murasugi (1990), Lobeck (1990), Martin (1996), suppose that a head can license ellipsis only if it participates in Spec-Head agreement.

(114) In (112)c, Infl (*will*) has undergone agreement with the subject; but *What* is the object. Perhaps this prevents the needed agreement between *What* and *will*.

(115) Making this precise could be tricky:

(116) There is a woman in the room

(117) There are women in the room

(118) Standard story: there has no agreement features. The 'associate' agrees with Infl via feature movement or Agree.

BUT

(119) John said there is a woman in the room, and indeed there is ~~a woman in the room~~

ALSO

(120) Mary read these books and Bill read those ~~books~~