**Repair by Ellipsis Revisited**

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 ∅ the weatherman
  b      I rolled up a newspaper, and Lynn did ∅ a magazine
  c      Kathy likes astronomy, but she doesn't ∅ 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~~
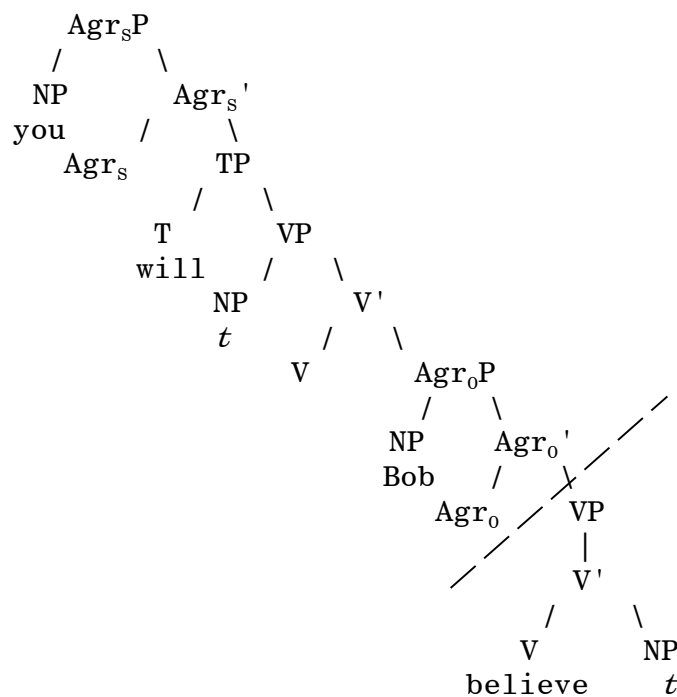
(4)     Pseudogapping as VP ellipsis, with the survivor rescued by moving out of the elided
        VP.     Jayaseelan (1990)

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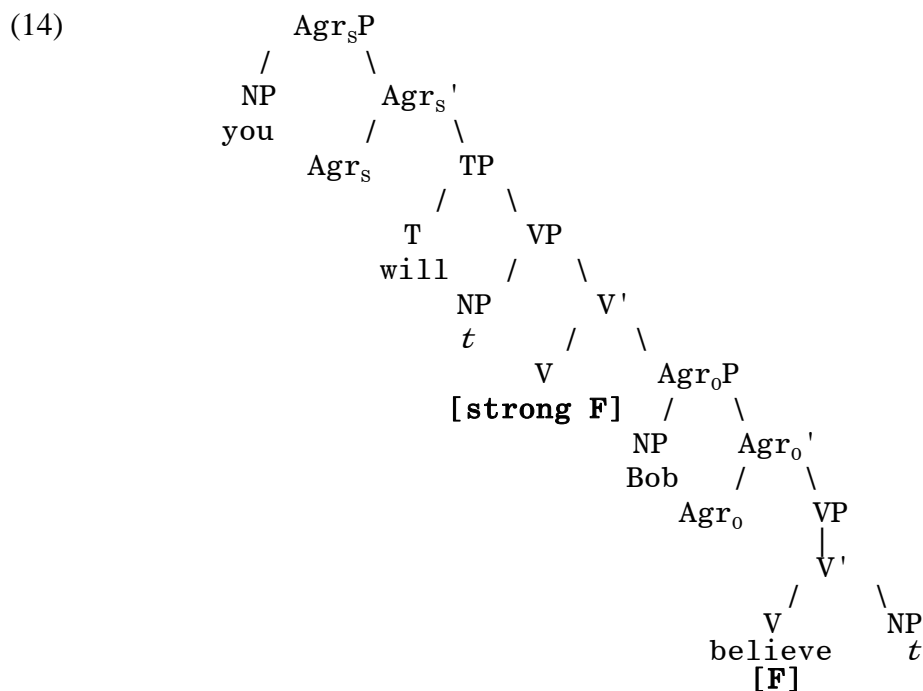
(7)     Pseudogapping as overt raising to Spec of $Agr_O$ (rather than Jayaseelan's Heavy NP
        Shift) followed by deletion of VP.  [Lasnik (1995b), Lasnik (1999b)]

(8)
```
                    Agr_S P
                   /      \
               NP        Agr_S '
              you      /      \
                 Agr_S        TP
                           /     \
                        T         VP
                      will      /    \
                             NP       V'
                             t      /    \
                                  V        Agr_O P
                                         /      \
                                     NP        Agr_O '
                                     Bob      /      \
                                         Agr_O      VP
                                                    |
                                                   V'
                                                 /    \
                                                V       NP
                                             believe    t
```

(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 $CH_{CAT}=(\alpha,t_\alpha)$, $\alpha$ 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
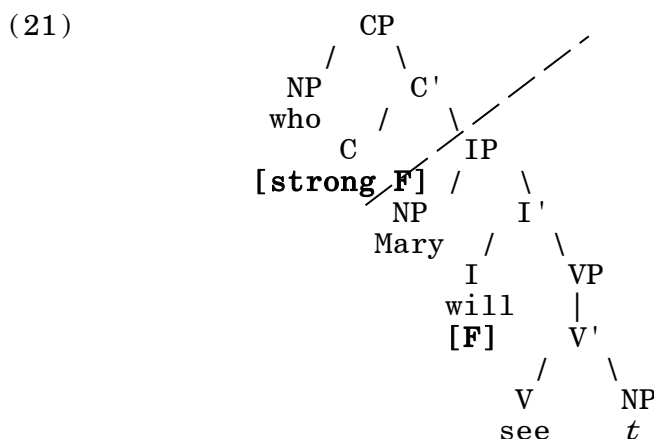       raised, a PF crash is avoided and the result is acceptable Pseudogapping.

(14)

```
                    Agr_S P
                   /        \
                NP          Agr_S '
               you         /      \
                      Agr_S        TP
                             /      \
                           T          VP
                         will       /   \
                               NP         V'
                                t       /    \
                                     V         Agr_O P
                             [strong F]      /     \
                                          NP        Agr_O '
                                          Bob      /    \
                                              Agr_O      VP
                                                         |
                                                         V'
                                                       /    \
                                                     V        NP
                                                  believe     t
                                                    [F]
```

(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), 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~~?

（21）
```
                        CP
                      /    \         ⁄
                   NP       C'      ⁄
                  who    /    \   ⁄
                       C      ⁄IP
                  [strong F] /    \
                        NP        I'
                      Mary    /     \
                           I       VP
                         will      |
                         [F]      V'
                                /   \
                              V      NP
                            see      t
```

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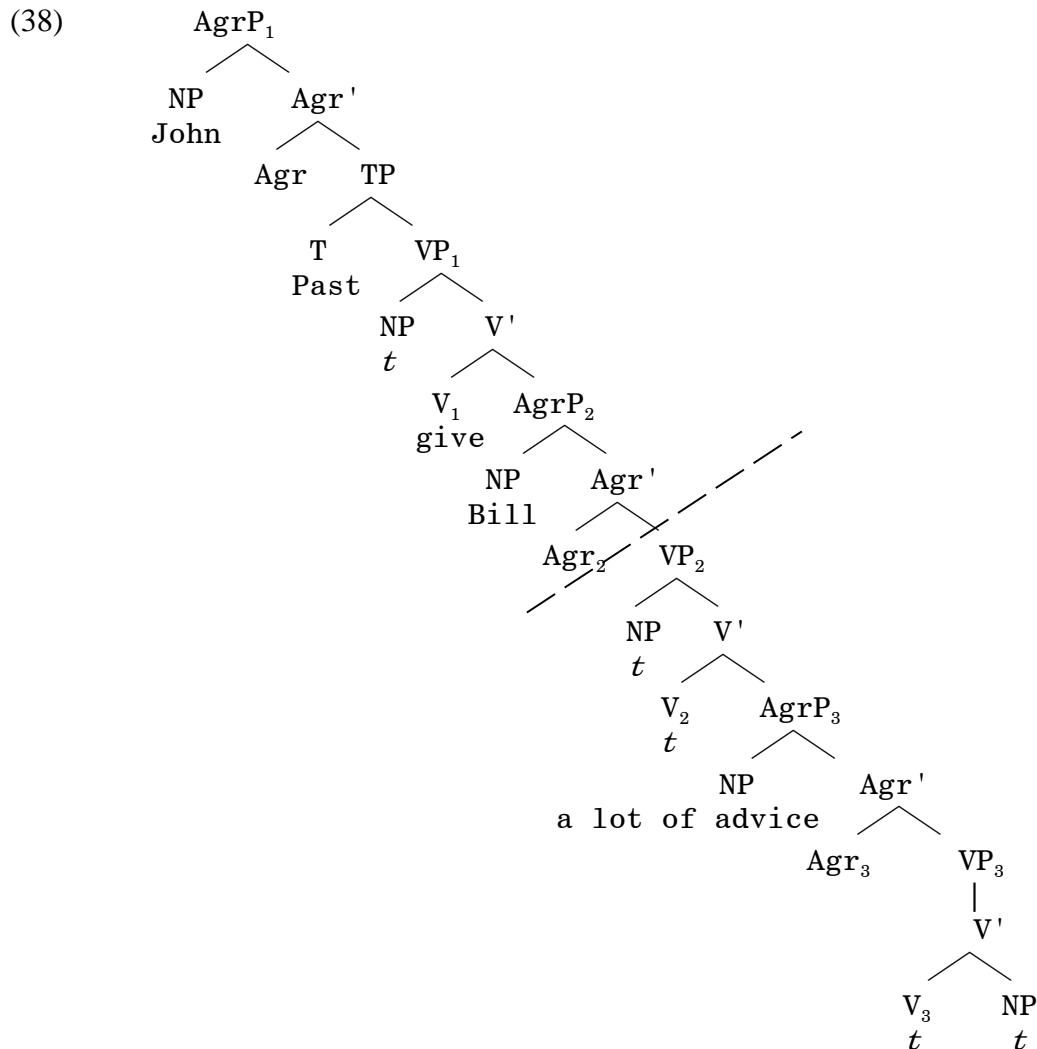
(25)    Mary will buy something.
(26)a   What will she buy?
    b   What?
    c  *What will?

(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 $Agr_O$.  If the lower NP is deleted along with the lower VP, then $Agr_O$
         never has a specifier, violating the EPP.  **End of digression**.

(33)     ... and John did ~~hire~~ Bill

(34)     Structure for 'standard' Pseudogapping, with $VP_2$ to be deleted:

(35)     
```
          AgrP₁
         /    \
       NP     Agr'
      John    /   \
            Agr    TP
                  /   \
                 T     VP₁
               Past   /  \
                    NP     V'
                     t    /  \
                         V    AgrP₂        /
                        /  \             / /
                      NP     Agr'       / /
                     Bill   /  \       / /
                          Agr /  VP₂  / /
                            / /   |  / /
                          / /    V' / /
                        / /     / \/ /
                      / /      V   NP
                    / /      hire   t
```
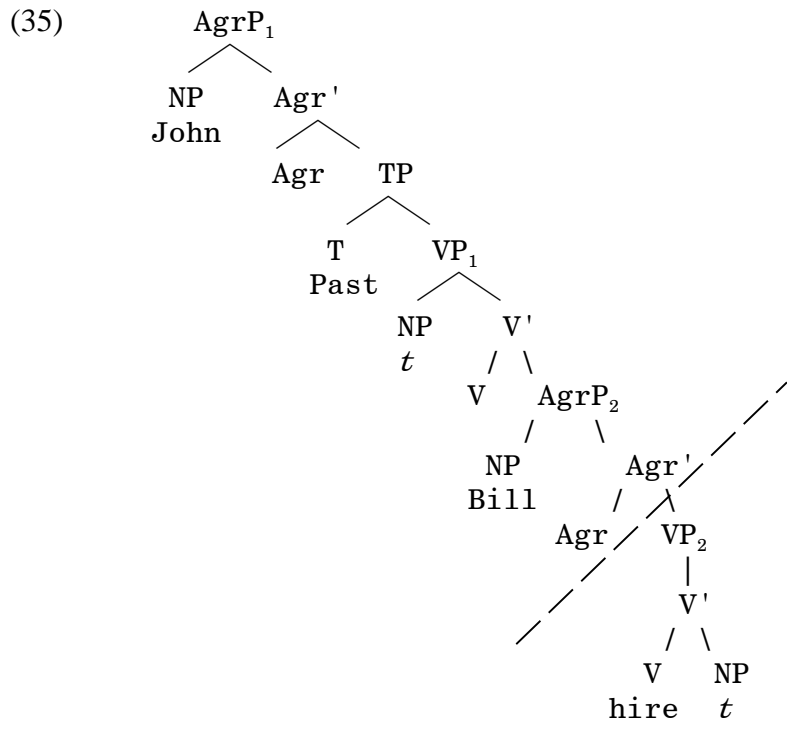
(36)   * ... and John gave Bill ~~a lot of advice~~

(37)   Structure for ill-formed Pseudogapping, with $VP_2$ to be deleted:

(38)

```
              AgrP₁
              /\
          NP     Agr'
          John   /\
              Agr    TP
                    /\
                  T     VP₁
                  Past   /\
                      NP     V'
                      t     /\
                          V₁     AgrP₂
                          give   /\
                              NP     Agr'
                              Bill   /\
                                  Agr₂  /  VP₂
                                      /   /\
                                    NP     V'
                                    t     /\
                                        V₂     AgrP₃
                                        t     /\
                                            NP          Agr'
                                        a lot of advice  /\
                                                    Agr₃     VP₃
                                                              |
                                                              V'
                                                             /\
                                                          V₃    NP
                                                          t     t
```

(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   pažldivo, 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)    Goldberg (2005) shows that Hebrew does not allow animate null arguments. This
        indicates that the answer given in (42) involves  VP ellipsis.

(52)    Even English evidently has certain instances of V-raising with VP ellipsis:
(53)    John was here and Mary was too

(54)    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**

(55)    John slept, and Mary will too

(56)a *John slept, and Mary will **slept** too

   b  John slept, and Mary will **sleep** too

(57)  **Hypothesis 1**:  Any form of a verb V can be 'deleted under identity' with any form of V.

(58)   *John was here, and Mary will too          [See Warner (1986)]

(59)a *John was here and Mary will **was** here too

   b  John was here and Mary will **be** here too

(60)  **Hypothesis 2**:  A form of a verb V can only be deleted under identity with the very
        same form.  Forms of <u>be</u> and auxiliary <u>have</u> (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).

(61)   John [Af] sleep, and Mary will ~~sleep~~ too

### B. Motivation for the hybrid morphological account

(62)   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.

(63)a  *John not left

   b   *John left not

(64)   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?

(65)   Note that in the crucial (58), the V (*is*)in the antecedent has raised to Infl.  Thus:

(66)   " [$_{VP}$ [$_V$ e] X ] cannot antecede VP-ellipsis."   Roberts (1998)

(67)   "...a trace of verb movement cannot serve as part of a VPE antecedent."  Potsdam
        (1996)

(68)   We have seen overwhelming evidence that both (66) and (67) are too strong.

(69)   A weaker version of (66) (and perhaps what he actually intended):

(70)   [$_{VP}$ [$_V$ e] X ] cannot antecede VP-ellipsis of [$_{VP}$ [V ] X ] ((where V is lexical))

(71)   "...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)

(72)  But even the weakened (70) 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.

(73)  Further, if (66) or (70) is correct, it should  generalize to all heads,  not be limited to V
         and trace of V:

(74)  [$_{YP}$ [$_Y$ e] X ] cannot antecede YP-ellipsis of [$_{YP}$ [Y ] X ].

(75)    But now we find still more counterexamples, based on Sluicing:

(76)    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~~]
(77)    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~~

(78)    Speaker A:  Never will [$_{IP}$ Susan *t* understand some linguists]
          Speaker B:  Tell me which linguists [$_{IP}$ ~~Susan will never understand~~]
(79)    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?

(80)    Given that a raised X$^0$ has had a feature (or set of features) checked and deleted, why
         <u>can</u> it antecede the deletion of an XP with its head in situ (as in some occurrences of
         Sluicing and Pseudogapping)?

(81)    On my analysis of these constructions presented above, the X in situ **has** had its
         features raised and checked.

(82)    But now, the major prima facie counter-examples to the revised version of Roberts'
         proposal (74) are fully compatible with it.

(83)    So why not accept the (revised) Roberts account of the gap in the original ellipsis
         paradigm?

(84)      John slept, and Mary will too
(85)    *John was here, and Mary will too

(86)     John was here, and Mary will ~~be here~~ too

(87)    Here <u>be</u> does not raise at all, with or without pied-piping, whereas <u>was</u> obviously does
         raise, resulting in features being checked and deleted.

(88)    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 <u>was</u>
         makes it **more** like <u>be</u>, not **less** like <u>be</u>.

## VII. Another kind of justification for (67)

(89)    [Under ellipsis] Corresponding X$^0$ 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.]
(90)    Chicken, she'll eat, but ostrich, she won't

(91)   Potsdam (1996) 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 (89) is universal.

(92)   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)

(93)   A1 is 'strict' or 'sloppy'.  A2 is only strict.

(94)    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

(95)  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."

(96)   Q: Does Dina knit the sweaters that she wears?
       A: No her mother$_i$ buys the sweaters that she$_i$ wears

(97)  The putative answer (96)A is strikingly unresponsive to the question.

(98)   dina soret et ha-svederim Se-  hi  loveSet, be-?od ima     Sela
       kona
       Dina knits   the sweaters that she wears    while  mother hers
       buys
(99)   Dina knits the sweaters that she wears while her mother buys them

(100)  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

(101)  ... and John did Bill

(102)  Structure for 'standard' Pseudogapping, with VP$_2$ to be deleted:

(103)

```
        AgrP₁
         /\
       NP   Agr'
      John   /\
           Agr   TP
                 /\
               T    VP₁
             Past    /\
                   NP    V'
                    t    / \
                        V   AgrP₂
                        /  \
                      NP      Agr'  /
                     Bill    /  \ /
                          Agr  / VP₂
                            /     |
                          /      V'
                                / \
                               V   NP
                             hire   t
```
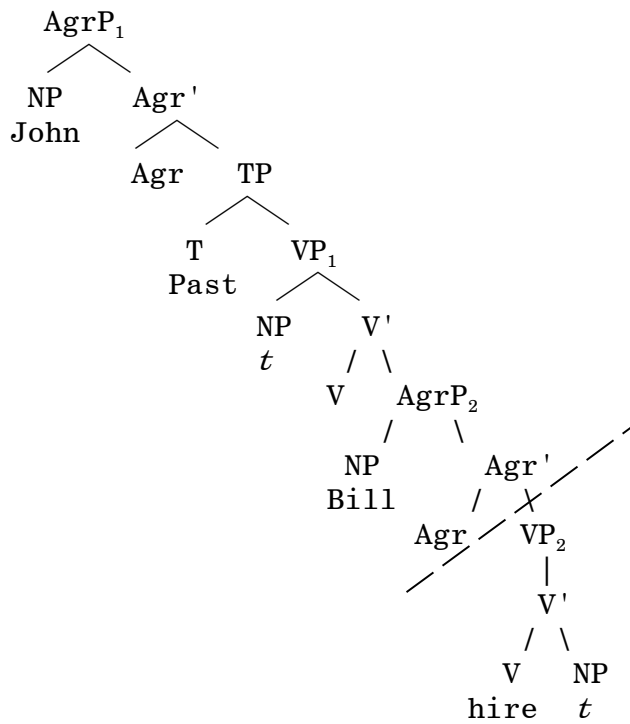
(104)   ... and John gave Bill ~~a lot of advice~~

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

(106)

```
                AgrP₁
               /    \
             NP      Agr'
            John    /    \
                  Agr     TP
                         /   \
                        T     VP₁
                      Past   /    \
                            NP     V'
                            t    /    \
                                V₁    AgrP₂
                               give   /    \
                                    NP      Agr'
                                   Bill    /    \
                                        Agr₂    VP₂
                                               /    \
                                             NP      V'
                                             t     /    \
                                                  V₂    AgrP₃
                                                  t    /    \
                                                     NP      Agr'
                                              a lot of advice /   \
                                                           Agr₃    VP₃
                                                                    |
                                                                    V'
                                                                  /    \
                                                                V₃     NP
                                                                t       t
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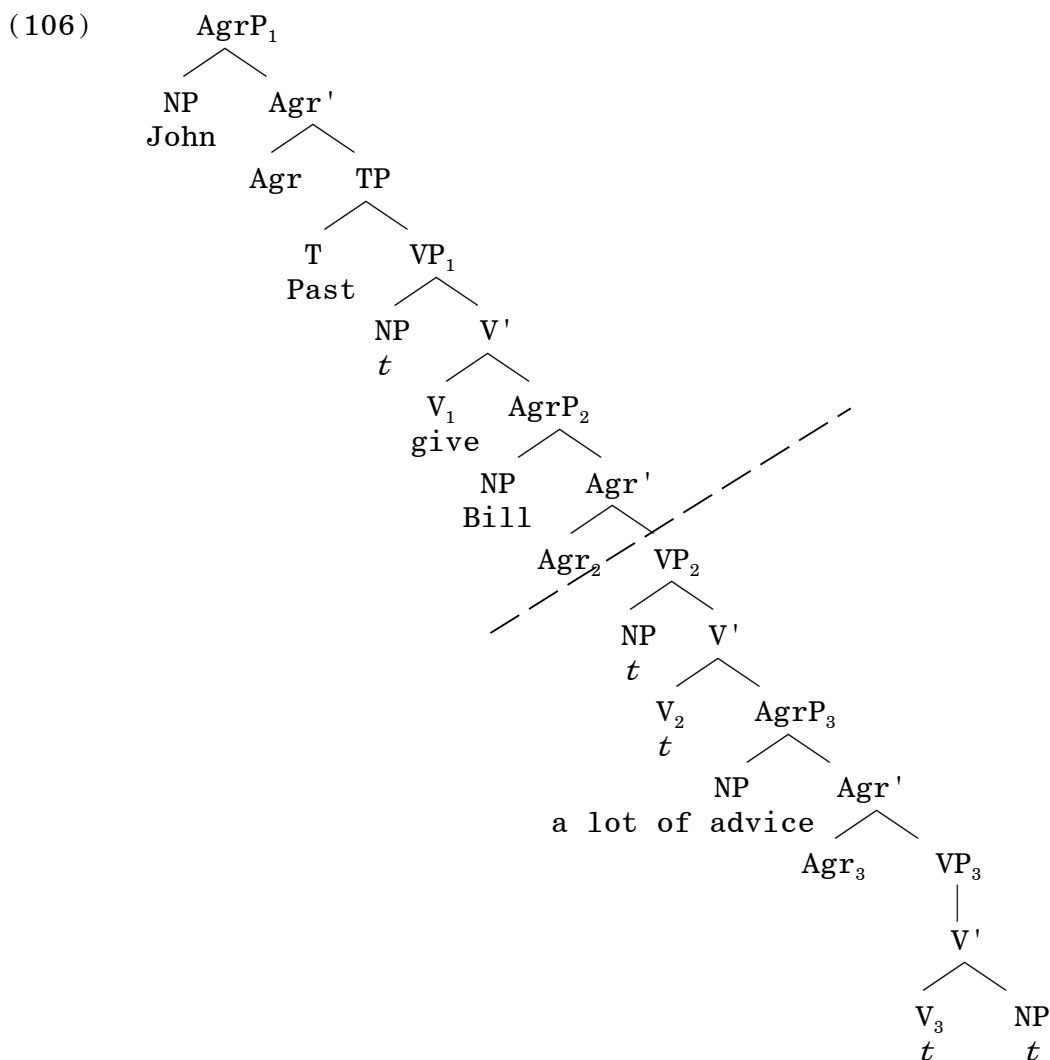
(107)   In both (103) and (106), two maximal projections intervene between the 'licensing'
head Past and the target VP, $VP_2$. However, in the acceptable (103) the intervening V
head is empty, while in the unacceptable (106) the intervening V is the lexical verb
<u>give</u>, which has raised from the lowest VP. I speculate that it is some version of
relativized minimality that states this difference.

(108)   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.

(109)   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.

(110)   In the ill-formed (106), 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.

(111)   In the acceptable (103), even though <u>hire</u> 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

(112)    Mary will buy something.
(113)a  What will she buy?
     b  What?
     c *What will?

(114)a   Assume that C is the licensor 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.

(115)   In (113)c, Infl (*will*) has undergone agreement with the subject; but *What* is the object.
        Perhaps this prevents the needed agreement between *What* and *will*.

(116)   Making this precise could be tricky:

(117)   There is a woman in the room
(118)   There are women in the room

(119)   Standard story: <u>there</u> has no agreement features.  The 'associate' agrees with Infl via
        feature movement or Agree.
BUT
(120)   John said there is a woman in the room, and indeed there is ~~a woman in the room~~

ALSO
(121)   Mary read these books and Bill read those ~~books~~

(122)   Johannes Jurka suggests yet another approach to the impossibility of Sluicing with
        Infl raising:
(123)   A: John has met someone. B: Really? Who (*has)?
(124)   Antecedent: [OP     [$_{TP}$ John has met indef.]]
        Sluice:        [who has  <[$_{TP}$ John *t* met indef.]]>
(125)   Under an extremely strong syntactic parallelism requirement, we might have a failure
        of parallelism here, assuming that either trace of aux V is non-identical to its
        antecedent, or that aux V raising leaves no trace. [See Section X.]
(126)   This raises hard problems for the analysis of Pseudogapping though.

## X. Another alternative treatment of the ellipsis gap

(127)   Omaki (2007) suggests that Lasnik's hybrid account may have to assume that head
        movement does not leave a copy, since the copies of the raised auxiliaries that are left
        behind in (128)b  are not identical and hence deletion under identity is predicted to be
        ungrammatical, contrary to fact.

(128)   a. John was here, and Bill and Mary were, too.
        b. John was [~~was~~ here], and Bill and Mary were [~~were here~~], too.

(129)   This offers another alternative account to the VP ellipsis paradigm, repeated as (130):
        In (130)b, *was* has moved to Infl, and leaves no copy behind (i.e., V slot is simply
        empty). Thus, the VP in the first clause and the second clauses are not identical, as
        shown in (131).

(130)   Main verb vs. auxiliary asymmetry in VP ellipsis (Warner, 1986)
        a. John slept, Mary will too
        b. *John was here, and Mary will too

(131)   John was [$_{VP}$ ___ here], and Mary will [$_{VP}$ ~~be here~~] too

(132)   But Omaki observes that an argument of Potsdam (1996) against Lasnik's analysis
        also raises difficulty for the no trace proposal.

(133)   If head movement leaves no copy behind, the VPs in the first and second clauses in
        Potsdam's British English sentences (134) should look identical (135). However, the
        sentences are bad, contrary to the prediction.

(134)   a. *I *have*n't  *t*  a dependable friend, unless you *are t* ~~a dependable friend~~.
        b. *Have* you  *t*  a good dentist? Yes, my cousin *is t* ~~a good dentist~~
        c. *Have* you *t* to be at the wedding rehearsal?
         *Yes, I *am t* ~~to be at the wedding rehearsal~~, at six. I'm needed to organize the guests.

(135)   a. *I haven't [$_{VP}$ ___ a dependable friend], unless you are [~~$_{VP}$ ___ a dependable friend~~]
        b. *Have you [$_{VP}$ ___ a good dentist]? Yes, my cousin is [~~$_{VP}$ ___ a good dentist~~]
        c.   Have you [$_{VP}$ ___ to be at the wedding rehearsal?]
           *Yes, I am [~~$_{VP}$ ___ to be at the wedding rehearsal~~], at six. I'm needed to organize the
        guests.

(136)   Omaki offers two potential solutions to this problem:

(137)   a. The reason why the British English sentences in (134) are bad may have nothing to
        do with form identity, but rather because the theta roles assigned to the NPs (e.g., *a
        dependable friend* in (134)a, etc.) are simply different, and violates semantic identity
        condition. In other words, both form and semantic identity may be necessary for
        recoverability of deletion.
        b. Another possible reason along the lines of the form identity assumption comes
        from the Case of the elided NP: Belletti (1988) has argued that the complement of *be*
        receives partitive Case, whereas the object of *have* would receive accusative Case,
        according to standard assumptions. In this sense, the form of the NPs in the elided
        VPs in (134) may superficially look the same but they may actually bear different
        forms.

## Section 2
## Sluicing 2 [Island violation repair]

### I. Ellipsis and island violation repair
####     A. The classic paradigm

(138)    I believe that he bit someone, but they don't know who (I believe that he bit)
(139)a  *I believe the claim that he bit someone, but they don't know who I believe the claim
          that he bit  [Complex NP Constraint, noun complement]
     b(??  )I believe the claim that he bit someone, but they don't know who
(140)a   *Irv and someone were dancing together, but I don't know who Irv and were dancing
          together  [Coordinate Structure Constraint]
     b(??)  Irv and someone were dancing together, but I don't know who
(141)a   *She kissed a man who bit one of my friends, but Tom doesn't realize which one of
          my friends she kissed a man who bit   [Complex NP Constraint, relative clause]
      b(??)She kissed a man who bit one of my friends, but Tom doesn't realize which one of
          my friends
(142)a   *That he'll hire someone is possible, but I won't divulge who that he'll hire is
          possible  [Sentential Subject Constraint]
      b  (??)That he'll hire someone is possible, but I won't divulge who          All above
          from Ross (1969)


(143)   Ross argues that the phenomenon of island violation repair provides "evidence of the
        strongest sort that the theoretical power of [global] derivational constraints is needed
        in linguistic theory..." [p.277]
(144)   If a node is moved out of its island, an ungrammatical sentence will result.  If the
        island-forming node does not appear in surface structure, violations of lesser severity
        will (in general) ensue.  [p.277]


(145)a  (*)I don't know which children he has plans to send to college
     b    He has plans to send some of his children to college, but I don't know which ones
        Chomsky (1972)


(146) I don't know CP

```
                         CP
             _____/_____
            NP                 IP        ✂
          __/\__           ___/\___
       which children    NP        Ī
                         |       __/\__
                        he      I     VP
                               ___/\___
                              V       NP*
                              |     __/\__
                             has  plans to send t to college
```
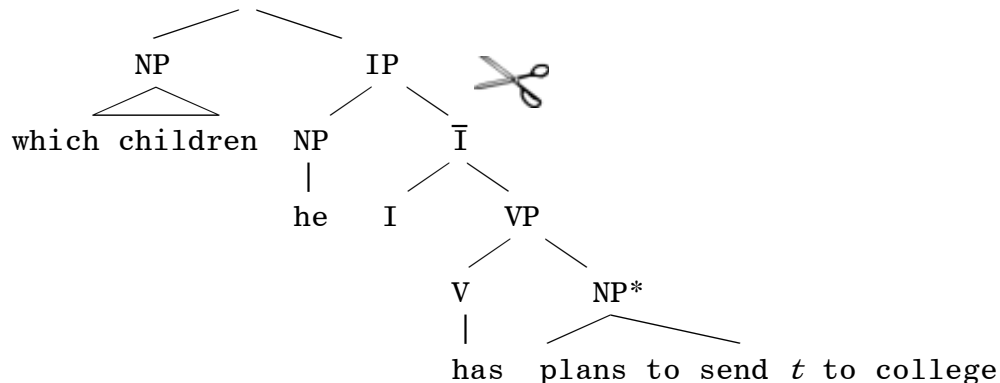
(147)   Chomsky rejects global derivational constraints, and suggests [see also Baker and
        Brame (1972), and, for an opposing view, Lakoff (1970), Lakoff (1972)] that * (# in
        Chomsky's presentation) is assigned to an island when it is crossed by a movement
        operation (the complex NP in (146)).  An output condition forbidding * in surface
        structures accounts for the deviance of standard island violations.

(148)   If a later operation (Sluicing in this case) deletes a category containing the *-marked
        item, the derivation is salvaged.

(149)   For Chomsky (1972), the condition banning * applies at surface structure.  The results
        are the same if, instead, it is a PF condition, as suggested by Lasnik (1995c), Lasnik
        (2001a).

### B. Possible approaches not requiring repair

(150)   Someone just left - guess who it was    ['Pseudosluicing' (something like clefting)]
(151)   Irv and someone were dancing together, but I don't know who it was

(152)   There is no island to repair on this copular analysis.
(153)   Merchant raises the question of the ultimate source of the copular sentences, and
        suggests that they are actually reduced forms of clefts with an extracted wh-phrase as
        pivot, as in:
(154)   Guess who [~~it was __ that just left~~]
(155)   But on such an account, Pseudosluicing actually wouldn't address the basic
        phenomenon at issue - lack of island effects - since as has been known since Ross
        (1967), clefts obey all the same island constraints as wh-interrogatives do

(156)   At any rate, Merchant argues convincingly that Pseudosluicing in any form cannot
        provide a general analysis for the Sluicing phenomenon, hence cannot provide a
        general answer to the repair problem.

(157)   In German, PPs can be 'survivors' of Sluicing, but can't be pivots of clefts:
(158)   *Mit wem war es, daß er gesprochen hat?
         with who was it that he   spoken   has
(159)    Er hat mit   jemandem gesprochen - rate   mal   mit   wem!
          He has with someone    spoken       - guess PRT with who

(160)   Further, crucially, PPs can be survivors even in island contexts.
(161)    Anke wird sich ärgern, wenn Peter mit     einem  der   Lehrer
          Anke will REFL upset    if Peter with   one   of the teachers
          spricht, aber ich weiß   nicht mehr, *(mit) welchem.
          speaks   but   I  know   not   more    with which
          'Anke will get upset if Peter talks to with one of his
          teachers, but I don't remember which.'

(162)   Romanian seems to have no cleft constructions at all, but still has Sluicing.
(163)    *E Ion {ce/care} a    cîştigat premiul   întîi
          is Ion  that/who has  won       prize.the  first
          'It's Ion that won first prize.'

```
(164)  *E Ion pe     care (l-)    am      întîlnit ieri
        is Ion ACC    who  him- have.1sg  met      yesterday
          'It's Ion who I met yesterday'
(165)   Cine-va   a    cîştigat premiul  întîi — ghici  cine!
          someone has   won      prize.the  first  guess who
          'Someone won first prize — guess who!'
```

(166)  Chung et al. (1995) argue that the amelioration of island effects with Sluicing follows
       from their account, in which there is no movement or deletion involved, but a type of
       LF copying.

(167)  However, Merchant (2001), following Ross (1969), provides strong evidence that
       syntactic movement (and hence deletion) *is* involved in Sluicing constructions.  The
       evidence involves:

(168)  'Case matching': In overtly Case inflected languages (such as German), the Case of
       the survivor is just what the Case of the fronted WH expression would have been in
       the non-elliptical form, and this is even true in the island violation configurations.

```
(169)  Er will  jemandem   schmeicheln, aber sie wissen nicht,
       he wants someone.DAT flatter      but they know    not
        *wer /     *wen /     wem
         who.NOM   who.ACC   who.DAT
        'He wants to flatter someone, but they don't know who.'
                                                  Merchant, p.89
(170)  Sie will  jemanden finden, der einem   der Gefangenen
       she wants someone  find    who one.DAT of  the prisoners
       geholfen hat, aber ich weiss nicht
       helped   has but  I   know  not
       *welcher /  *welchen /  welchem
        which.NOM   which.ACC   which.DAT
        'She wants to find someone who helped one of the prisoners,
       but I don't know which.'                 Merchant, p.91
```

(171)   And preposition stranding: In languages that allow P-stranding (such as English), the
        survivor can be the bare object of a preposition; in languages that don't (such as
        Greek) it can't, and, crucially, this is even true in the island violation configurations.
        [Big remaining question: Why can't P-stranding violations be repaired by ellipsis?]

(172)  Peter was talking with someone, but I don't know who            Merchant, p.92
(173)  Peter's mom will get angry if he talks with someone from his class, but I don't
       remember who

(174)   I    Anna milise me    kapjon, alla dhe ksero *(me) pjon
        the Anna spoke  with someone but  not I.know with who
(175)   I  mitera tou Giannis tha thimosi   an milisi   me  kapjon
        the mom   of  Giannis FUT get.angry if he.talks with someone
        apo  tin taksi tou, alla dhe thimame    *(me) pjon
        from the class his  but  not I.remember with who
    'Giannis's mom will get angry if he talks with someone from his
    class, but I don't remember who.'

(176)   So there is island violation repair. Maybe along the lines of Chomsky (1972)?
(177)   Possible problem: In Chomsky's approach, "a new element is introduced..."
                                                        Lakoff (1972, p.81)

(178)   Kitahara (1999) gives an argument reminiscent of Lakoff's against an approach like
        Chomsky's (though for a slightly different phenomenon - ECP reduction to mere
        Subjacency via deletion of *-marked trace):

(179)   "... a *-feature, which is not a lexical feature – since it appears nowhere in the lexicon
        – ... enters into a derivation as the output of certain movements.  ...this assumption
        violates the Inclusiveness Condition."  p.79

(180)   Kitahara's alternative to *-marking (for the related phenomenon mentioned just
        above):
(181)   An expression is marginally deviant if its derivation employs an MLC-violating
        application of Attract.  p.80
(182)   But how is that marginal deviance represented?
(183)   What won't work: Send the deviance information to the interface(s) immediately. This
        would predict that there is never repair.
(184)   Technical solution to the Inclusiveness problem: Everything is 'born' with a ✓. When
        a violation occurs, the ✓ is erased. A representation with an item lacking a ✓ is
        unacceptable.

(185)   Merchant (2001) gives an empirical argument against Chomsky's (1972) approach,
        based on instances of:

## II. Failure of island violation repair

(186)   *They want to hire someone who speaks a Balkan language, but I don't know which
        they do [VP want to hire someone who speaks t]              Merchant (2001)
(187)   Compare (188), which also involves a relative clause island:
(188)   They want to hire someone who speaks a Balkan language, but I don't know which
        (Balkan language) [IP they want to hire someone who speaks t]        Merchant (2001)

(189)   In fact, Chung et al. (1995) had already claimed that Sluicing and VP ellipsis diverge
        in this way, concluding that the latter, unlike the former, is an instance of deletion.
        Their example involved an adjunct island:
(190)   We left before they started playing party games.
        *What did you leave before they did [VP start playing t]?

(191)   Note, though, that this case, unlike Merchant's, is actually consistent with Chomsky's
        account (which Chung et al. (1995) do not consider), as the island is not eliminated in
        (190), unlike the situation in (186).

(192)   Merchant, on the other hand, takes all ellipsis to be PF deletion, and argues that only
        some islands represent PF effects.  Others, especially including relative clause islands,
        are LF constraints, and their violation therefore cannot be repaired by ellipsis, a PF
        process.

(193)   (188) is then reanalyzed as:
(194)   They want to hire someone who speaks a Balkan language, but I don't know which
        (Balkan language) [$_{IP}$ ~~she should speak $t$~~]                    [See also Baker and Brame (1972)]
(195)   They hired someone who speaks a Balkan language –
        Guess which [~~she speaks $t$~~]

(196)    No-one moved to a certain town – guess which!    Merchant p.225
(197)    (196) has no island, so is unproblematic.  But...
(198)    Noone had a student who worked on a certain Balkan language, but I can't remember
        which Balkan language      Lasnik (2001d)

(199)   There are also cases where structure that includes the island must exist in the Sluicing
        site in order to license an item in the Sluicing remnant:

(200)   Every linguist$_i$ met a philosopher who criticized some of his$_i$ work, but I'm not sure
        how much of his$_i$ work [~~every linguist$_i$ met a philosopher who criticized $t$~~]

(201)   Each of the linguists met a philosopher who criticized some of the other linguists, but
        I'm not sure how many of the other linguists
(202)   !How many of the other linguists did the philosopher criticize

(203)   Consider now Merchant's PF islands: COMP-trace effects; derived positions
        (topicalizations, ?subjects)

(204)   It appears that a certain senator will resign, but which senator [~~it appears that $t$ will
        resign~~] is still a secret   [adapted from Merchant p.185]

(205)   Sally asked if somebody was going to fail Syntax One, but I can't remember who
        [~~Sally asked if $t$ was going to fail Syntax One~~]      Merchant p.185, from Chung et
        al. (1995)

(206)   She said that a biography of one of the Marx brothers is going to be published this
        year, but I don't remember which [~~she said that a biography of $t$ is going to be
        published this year~~]   [adapted from Merchant p.185]
(207)    Recall the apparent failure of island violation repair with Merchant's LF island:
(208)   *They want to hire someone who speaks a Balkan language, but I don't know which
        they do [$_{VP}$ ~~want to hire someone who speaks $t$~~]

(209)   Surprisingly, we find the same apparent failure of repair with Merchant's PF islands
        [Lasnik (2001)]:

(210)   *It appears that a certain senator will resign, but which senator it does [appear that ~~t~~
~~will resign~~] is still a secret                                    [that-trace]

(211)   *Sally asked if somebody was going to fail Syntax One, but I can't remember who she
did [~~ask if t was going to fail Syntax One~~]                        [if-trace]

(212)   *She said that a biography of one of the Marx brothers is going to be published this
year, but I don't remember which she did [~~say that a biography of t is going to be~~
~~published this year~~]                         [subject condition]

(213)   And now notice that parallel 'failure of repair' obtains even when there was no
violation in the first place.

(214)   Extraction out of an embedded clause is typically fine and Sluicing is just as good, but
VPE is bad:

(215)   They said they heard about a Balkan language, but I don't know which Balkan
language they said they heard about

(216)   They said they heard about a Balkan language, but I don't know which Balkan
language

(217)   *They said they heard about a Balkan language, but I don't know which Balkan
language they did

(218)   Similarly for extraction out of an object NP:

(219)   They heard a lecture about a Balkan language, but I don't know which Balkan
language they heard a lecture about

(220)   They heard a lecture about a Balkan language, but I don't know which Balkan
language

(221)   *They heard a lecture about a Balkan language, but I don't know which Balkan
language they did

(222)   Even short movement of a direct object shows rather similar behavior:

(223)    They studied a Balkan language but I don't know which Balkan language they
studied

(224)    They studied a Balkan language but I don't know which Balkan language

(225) ??They studied a Balkan language but I don't know which Balkan language they did

(226)   Is VPE blocked when Sluicing is available (Merchant's MaxElide, sort of 'Delete as
much as you can')?

(227)   Someone solved the problem.
Who (?did)?

(228)   Is a VPE site precluded from containing a WH trace?

(229)   I know what I like and what I don't    Merchant p.58 [See Fiengo and May (1994) for
similar examples.]

**III. Towards a Solution**  [This section is based on Fox and Lasnik (2003)]

(230)   The constraint seems to be specific to VPE, and seems limited specifically to
circumstances where an indefinite antecedes a WH-trace.  In fact, in other
circumstances, VPE can even repair actual island violations (though it is ultimately
unclear why this should be so):

(231)   *[How interesting] did Brio write [a *t* novel]
(232)a   Pico wrote a more interesting novel than Brio did
     b   Pico wrote a more interesting novel than [*Op* Brio did ~~write a *t* novel~~]
                                          Kennedy and Merchant (2000)

(233)   For the ill-formed VPE cases above, which contrasted with the Sluicing examples, the
        fact that VPE deletes a smaller portion of the structure than Sluicing (IP ellipsis)
        could be relevant.

(234)   But first, a prior question: Why can an indefinite antecede a WH-trace?

(235)a  An old idea: a WH expression combines an interrogative and an indefinite.  (See,
        among many other references, Stockwell et al. (1973, p.606).)
     b  The 'trace' is the indefinite.

(236)   Fred said that Mary talked to a certain girl, but I don't know which girl <~~Fred said that
        Mary talked to t~~>

(237)   Suppose, following Chung et al. (1995), that the indefinite must be bound by
        existential closure in a way that is parallel to the <u>wh</u>-dependency in the sluiced clause

(238)   And suppose, contra Merchant (2001), that formal parallelism is required for ellipsis.
        This is satisfied since the variables in the antecedent and the elided clause are bound
        by parallel operators and from parallel positions. [The verbal morphology facts
        discussed in Section 1, Part IV support the idea that some kind of formal identity is
        required for ellipsis. See also Section 2, Part VI.]

(239)   Now notice that in the structure shown, there are no intermediate traces in the elided
        portion (in angle brackets), indicating that there were no intermediate landing sites in
        the movement.

(240)   If there had been successive movement, under plausible assumptions the relevant
        portions of the antecedent and the ellipsis site would not be parallel, and this would
        prevent ellipsis.

(241)a  This seems to be problematic under the assumption that successive cyclic movement
        is required by considerations of locality.
     b  But as discussed earlier, considerations of locality are nullified under deletion (island
        repair, as in the proposal of Chomsky (1972) or Lasnik (2001a)).

(242)   But why is there no 'repair' with VPE?
(243)   VPE involves deletion of a smaller constituent than the clause that is elided in sluicing
        (VP vs. TP):

(244)   which girl  [$_{TP}$ he T [$_{AspP}$ did <$_{VP}$ ~~say that I talked to g(girl)~~>]]
(245) *Fred said that Mary talked to a certain girl, but I don't know which girl he did

(246)   The unacceptability of VPE follows if we assume that one of the two remaining
        maximal projections, AspP or TP, is an 'island' that must be circumvented by
        adjunction or repaired by deletion. [This roughly follows the claim of Chomsky
        (1986a) that all XPs are potential barriers.]  Since the island is not deleted, the escape
        hatch is required, and a violation of Parallelism is unavoidable.

(247)   An interesting consequence of this line of analysis: Movement must not be allowed to
        proceed in one long 'island-violating' step followed by short successive steps. If this
        were allowed, the ellipsis site could lack any intermediate traces, making it parallel to
        its antecedent. And the undeleted portion could be free of *s.

(248)   Metaphorically, when you enter the subway, once you have chosen the express, you
        can't switch to a local train at a local stop.


(249)   This line of reasoning straightforwardly covers the badness of the classic island
        situations discussed by Merchant.


(250)   Since this account of the contrast between VPE and sluicing relies crucially on the
        fact that there is movement in the elided constituent but not in the antecedent
        constituent, a prediction is that if the antecedent clause is replaced with a clause that
        involves movement, both VPE and sluicing would be possible.


(251)a   I know which book John said that Mary read, but YOU don't know which one
      b ?I know which book John said that Mary read, but YOU don't know which one he did.


Compare:
(252)a   I know that John said that Mary read a certain book, but I don't know which one.
      b  *I know that John said that Mary read a certain book, but I don't know which one he
         did.


(253)   Now recall the somewhat less degraded status of very short movement cases such as
        (225), repeated here:
(254) ??They studied a Balkan language but I don't know which Balkan language they did
(255)   This can now plausibly be explained in terms of Pseudogapping. The WH-trace can be
        completely outside of the ellipsis site, so parallelism is not at issue for it. If I am right
        that the raising of the Pseudogapping survivor is A-movement, it follows that long
        distance instances will still not be possible.


(256)   [$_{CP}$ which Balkan language [$_{TP}$ they T [$_{AspP}$ did [$_{VP}$ $t_{they}$ [$_{AgrP}$ $t_{Wh}$ [$_{VP}$ ~~study $t$~~]]]]]]
                                                                        Lasnik (1995b)

(257)
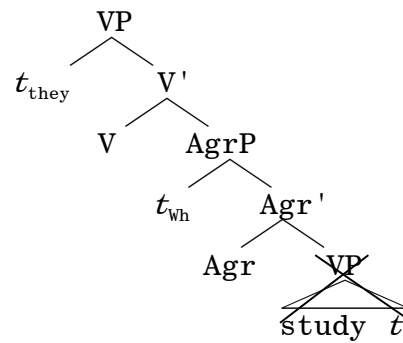


(258)  (?)Mary studied Bulgarian and John did Macedonian

(259)  Finally (and most speculatively) violations of island constraints with wh-movement of adjuncts cannot be repaired.

(260)   A student solved the problem (somehow), but I'm not sure exactly how

(261)  *Mary met a student who solved the problem (somehow), but I'm not sure exactly how
(262)  *That Susan will solve the problem (somehow) is unclear, and I think I know how

(263)  This will follow on the theory of Lasnik and Saito (1984), Lasnik and Saito (1992) that the locality constraints on adjuncts (unlike those on arguments) must be satisfied at LF.  Thus, PF deletion will be of no avail.

(264)  In fact, as Benjamin Bruening observes, it is generally very difficult to get 'long distance' readings of wh-adjuncts in Sluicing constructions altogether:

(265)   John left (for some reason), but I don't know [CP exactly why [IP John left t]]
(266)?*Mary claimed that John left (for some reason), but I don't know [CP exactly why [IP Mary claimed [that John left t]]]

(267)?*Bob thinks that Mary fixed the car (somehow) but I don't know exactly how [IP Bob thinks that Mary fixed the car t]

(268)  This too could generally follow from the Lasnik-Saito approach to locality, though some details would have to be reconsidered.

## IV. Long A-movement and VP ellipsis

(269)  *Susan thought Mary studied Bulgarian and John did think Mary studied Macedonian

(270)  Myung-Kwan Park asks "Why can't the 'long' movement of *Macedonian* in (269) be repaired by ellipsis?"

(271)  A-movement from a Case checking position is barred.

(272)  We must "prevent a nominal phrase that has already satisfied the Case Filter from raising further to do so again in a higher position."   Chomsky (1986b, p.280)

(273)  "...a [-Interpretable] feature is 'frozen in place' when it is checked, Case being the
        prototype."   Chomsky (1995b, p.280)

(274)  *my belief [John to seem [$t$ is intelligent]

(275)  "... a visible Case feature ... makes [a] feature bundle or constituent available for 'A-
        movement'.  Once Case is checked off, no further [A-]movement is possible."
        Lasnik (1995c, p.16)

(276)  "If uninterpretable features serve to implement operations, we expect that it is
        structural Case that enables the closest goal G to select P(G) to satisfy EPP by Merge.
        Thus, if structural Case has already been checked (deleted), the phrase P(G) is "frozen
        in place," unable to move further to satisfy EPP in a higher position. More generally,
        uninterpretable features render the goal active, able to implement an operation: to
        select a phrase for Merge (pied-piping) or to delete the probe."  Chomsky (2000,
        p.123)

(277)  Pseudogapping is A-movement of the survivor (to Spec of $Agr_O$) followed by VP
        ellipsis.

(278)  Object shift is optional in English. (More on this below.) Hence [$_v$ V DP] must be a
        Case checking configuration.

(279)  'Long' Pseudogapping involves impossible A-movement from a Case position.  This is
        not an island violation.

(280)  But what of 'short' Pseudogapping? How can the survivor ever escape from the elided
        VP?

(281)  "... all operations within the phase are in effect simultaneous."          Chomsky (2001)

**V. Island violation repair in single cycle syntax**

(282)  **Multiple Spell Out (Uriagereka (1999))**: Assume the first step of Kayne's LCA:
        a. If A c-commands B then A precedes B (defined on terminals).
(283)  Then for complex A, SO 'flattens' the structure C that contains A and c-commands B,
        destroying internal phrasal boundaries. This essentially turns C into a terminal and
        allows it to linearize via (282)a.
(284)  This deduces many islands (basically all non-complements).
(285)  Now suppose this flattening is optional. If it is not done, extraction will be possible,
        but, of course, linearization will ultimately fail (as the cycle demands that there will
        be no later opportunity to flatten).
(286)  But it won't fail if the problematic material is rendered invisible to phonetics. Thus,
        repair of (at least these) islands by deletion.

(287)  **Fox and Pesetsky (2003)** propose that at each spell-out domain, linear ordering
        statements are added to an ever growing Ordering Table.
(288)  When movement does not proceed from each successive phase edge, contradictory
        ordering statements ultimately appear in the Table.

(289)   When deletion takes place, it can have a salvation effect by eliminating all statements involving deleted material, including the contradictory statements that can result from moving too far in one jump. Island violation repair is one such situation.

**VI. Another argument for a syntactic identity requirement in ellipsis**   [Merchant (2005), (2008)]

(290)   Voice mismatches are impossible in sluicing.

(291)   *Joe was murdered, but we don't know who. <~~murdered Joe~~>
(292)   *Someone murdered Joe, but we don't know who by. <~~Joe was murdered~~>

(293)   Voice mismatches are possible with VP-ellipsis.

(294)   This problem was to have been looked into, but obviously nobody did. <~~look into this problem~~>   (from Kehler 2002:53)
(295)   In March, four fireworks manufacturers asked that the decision be reversed, and on Monday the ICC did. <reverse the decision>. (Dalrymple (1991), cited by Kehler
(296)   The janitor should remove the trash whenever it is apparent that it needs to be <~~removed~~>

(297)   Merchant argues that this disparity follows from different targets for deletion:
        • in sluicing, a clausal node that necessarily includes Voice
        • in VP-ellipsis, the verbal projection that is complement to Voice

(298)   *Joe was murdered, but we don't know who
(299)
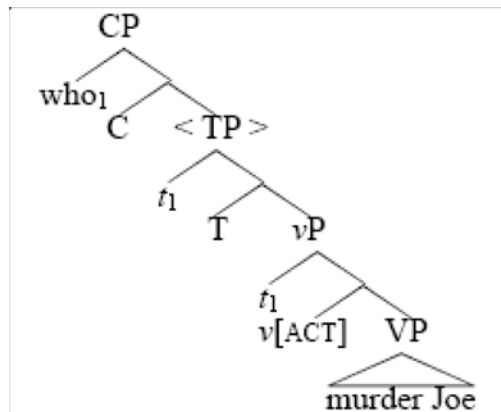


(300)   This problem was to have been looked into, but obviously nobody did

(301)
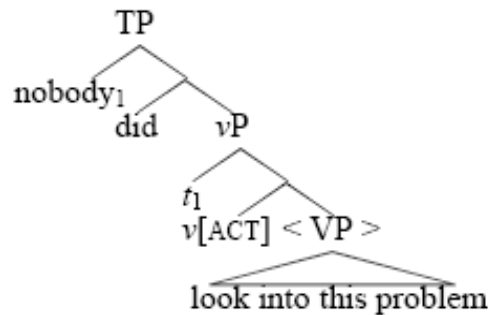


(302)  "Despite first appearances, voice mismatches are uniformly impossible under ellipsis: ellipsis requires identity of syntactic structure, including that of [voi] heads. Apparent mismatches arise under VP-ellipsis only because what is elided in those cases is in fact something smaller than a verbal projection containing [voi]: it is merely VP."
Merchant (2008, p.176)

(303)  "The fact that voice mismatches have an apparently uneven distribution across different ellipsis types constitutes a problem for theories that claim that ellipsis is uniformly licensed by semantic identity of some sort ... Only an analysis that posits syntax in the ellipsis site and identity of syntactic structure can capture the fact that larger ellipsis sites will be sensitive to voice, while smaller ones will not be."
Merchant (2008, pp.176-177)

## VII. Appendix: Speculations on P-stranding

(304)  As noted earlier, P-stranding violations evidently cannot be repaired by ellipsis. This is rather mysterious, in fact paradoxical if the P-stranding constraint is an "island constraint".

(305)  Abels (2003) shows that in one crucial respect, the P-stranding prohibition (in languages that exhibit it) diverges from standard island constraints: While the complement of the P cannot move, subextraction out of the PP is (sometimes) possible.

(306)  Some Russian examples:

(307)  Ot  čego  sleduet  otkazaťsja
        Of  what  follows  give up-self
      'What should one give up?'

(308)  *Čego  sleduet  otkazaťsja    ot
         what  follows  give up-self of

(309) ?Na čto  sleudet otkazaťsja    ot vsjačeskih pretenzij
        on what follows give up-self of whatsoever hopes
      'What should one rid oneself of any kind of hope for?'

(310) *Kakih argumentah protiv ehtoj točki zrenija ty ešče ne slyšal o
         which arguments  against this   point view   you yet  not heard about
      'Which arguments against this point of view haven't you heard about?'

(311) ?Protiv kakov točki zrenija ty ešče ne slyšal  ob      argumentah
        against which point view   you yet not heard about arguments
      'Against which point of view haven't you heard about arguments?'

(312)   "The existence of examples like [(309)] shows that PPs are not inherently barriers to
         movement. Moreover, the sharp contrast between [(308)] and [(309)] shows that
         subextraction out of PP and P-stranding are clearly different phenomena."      p. 160

(313)   Standard island violations (at least most of them) do not show this pattern. Rather,
         extraction from deeper in the island is still bad.

(314) *That he'll hire someone is possible, but I won't divulge who that he'll hire is possible
         [Sentential Subject Constraint]
(315) *That Mary thinks he'll hire someone is possible, but I won't divulge who that Mary
         thinks he'll hire is possible

(316)a *She kissed a man who bit one of my friends, but Tom doesn't realize which one of
         my friends she kissed a man who bit   [Complex NP Constraint, relative clause]
(317)a *She kissed a man who Bill said bit one of my friends, but Tom doesn't realize which
         one of my friends she kissed a man who Bill said bit   [Complex NP Constraint,
         relative clause]

(318) **DIGRESSION** 'Deeper' Coordinate Structure Constraint violations do improve. I won't
         have anything to say about that here.
(319) **Who was John dancing with Mary and
(320)   *Who was John dancing with Mary and a student of
**END OF DIGRESSION**

(321)   So why can't P-Stranding violations be repaired? I conjecture (roughly following a
         suggestion of Merchant (2001) for another phenomenon) that there is a distinction
         between constraints whose violations are marked in the output and those that are more
         strictly properties of derivations. (See, in this connection, Lasnik (2001a) and Boeckx
         and Lasnik (2006).)

(322)   'Derivational' constraints can't be repaired (Merchant's suggestion about Superiority).

(323)   Suppose now that the P-stranding constraint is derivational: the A-over-A.
(324)   Chomsky (1973) proposed this in anticipation of Postal's argument against successive
         cyclic wh-movement (Postal (1972)).

(325)a  To whom do you think (that) John talked
     b  Who do you think (that) John talked to
     c *Who do you think to (that) John talked

(326)   To allow (325)a and (325)b, Chomsky proposes that the wh-feature on *who*(*m*) can
         'percolate' to the PP *to whom*.
(327) (325)c is still not possible, since the initial move of the PP means the feature has
         percolated, so the second step is ruled out by the A-over-A condition.

(328)   Suppose then that the difference (or one of the differences) between languages that do
         and don't allow P-stranding in initial position is whether the wh-feature **can** or **must**
         percolate from DP to immediately dominating PP.

(329)   In the latter type of language, even the first P-stranding step would violate the A-over-
        A. And if we continue to take that as a constraint on the operation of the
        transformation, P simply couldn't be stranded, so repair would never be a possibility.

(330)   As Ross (1969) observes, even in English, pied piping is sometimes required:
(331)a  Under what circumstances will the moon implode
     b  *What circumstances will the moon implode under
(332)   Ross does not point out, though, that this English violation can be repaired by
        Sluicing:
(333)   The moon will implode under certain circumstances, but I'm not sure exactly what
        circumstances
(334)   Thus, the English effect does pattern with island constraints. In fact, the CED (which
        bars extraction out of adjuncts) seems like the relevant island constraint, at least for
        this example.

(335) **PROBLEM (OR MYSTERY?)** Almeida (2005) observes that Brazilian Portuguese is
        a strongly non-P-stranding language, yet Sluicing seems to repair violations, unlike
        the situation in the languages documented by Merchant (2001):

(336) A   Maria dançou com  alguém
        the Maria danced  with someone
(337) Com  quem que  a   Maria dançou *t*
        with   whom that the Maria danced
(338)*Quem que  a   Maria dançou com  *t*
         who  that the Maria danced with

(339) A   Maria dançou com  alguém,  mas eu não lembro     com quem
        the Maria danced  with someone  but I  NEG remember with who
(340) A   Maria dançou com  alguém,  mas eu não lembro   quem
        the Maria danced  with someone  but I  NEG remember who

(341)   Perhaps the ban on P-stranding is not a unified phenomenon. Further investigation is
        called for.

## Section 3
## The Existence (and Optionality) of Overt Object Shift in English

(342) The DA proved [two men to have been at the scene of the crime] during each other's
        trials
(343) The DA proved [no suspect$_i$ to have been at the scene of the crime] during his$_i$ trial
(344) The DA proved [noone to have been at the scene] during any of the trials
        Lasnik and Saito (1991), following Postal (1974)

(345) ?*The DA proved [that two men were at the scene of the crime] during each other's
        trials
(346) ?*The DA proved [that no suspect$_i$ was at the scene of the crime] during his$_i$ trial
(347) ?*The DA proved [that noone was guilty] during any of the trials

(348)  The DA accused two men during each other's trials
(349)  The DA discredited no suspect$_i$ during his$_i$ trial
(350)  The DA cross-examined none of the witnesses during any of the trials

(351)  Which book that John$_i$ read did he$_i$ like
(352) *He$_i$ liked every book that John$_i$ read
(353) *I don't remember who thinks that he$_i$ read which book that John$_i$ likes
(354) Chomsky (1981): S-structure is crucial to at least one of the binding conditions,
        Condition C.

(355)  Barss (1986) draws the same conclusion for Condition A, based on examples like the
        following:
(356)  John$_i$ wonders which picture of himself$_i$ Mary showed to Susan
(357) *John$_i$ wonders who showed which picture of himself$_i$ to Susan

(358)  Under the minimalist assumption that there is no level of S-structure, the LF
        operations QR and wh-movement either don't exist or they apply in such a way that
        binding possibilities don't change.

(359)  Lasnik and Saito (1991) and den Dikken (1995) draw the same conclusion about the
        'expletive replacement' operation proposed by Chomsky (1986b):
(360) *The DA proved [there to have been two men at the scene of the crime] during each
        other's trials
(361) *The DA proved [there to have been no suspect$_i$ at the scene of the crime] during his$_i$
        trial
(362) *The DA proved [there to have been noone at the scene] during any of the trials

(363) Under the 'split-VP' hypothesis of Koizumi (1993) and Koizumi (1995):

(364)  She will prove Bob to be guilty

(365)

```
                Agr_sP
              /      \
          NP          Agr_s'
          she        /   \
                 Agr_s     TP
                         /   \
                      T        VP
                    will     /    \
                         NP          V'
                        t_she      /    \
                               V        Agr_oP
                             prove     /    \
                                    NP        Agr_o'
                                    Bob      /    \
                                        Agr_o      VP
                                        t_prove     |
                                                    V'
                                                  /    \
                                               V        Agr_sP
                                            t_prove    /    \
                                                     NP   to be guilty
                                                    t_Bob
```
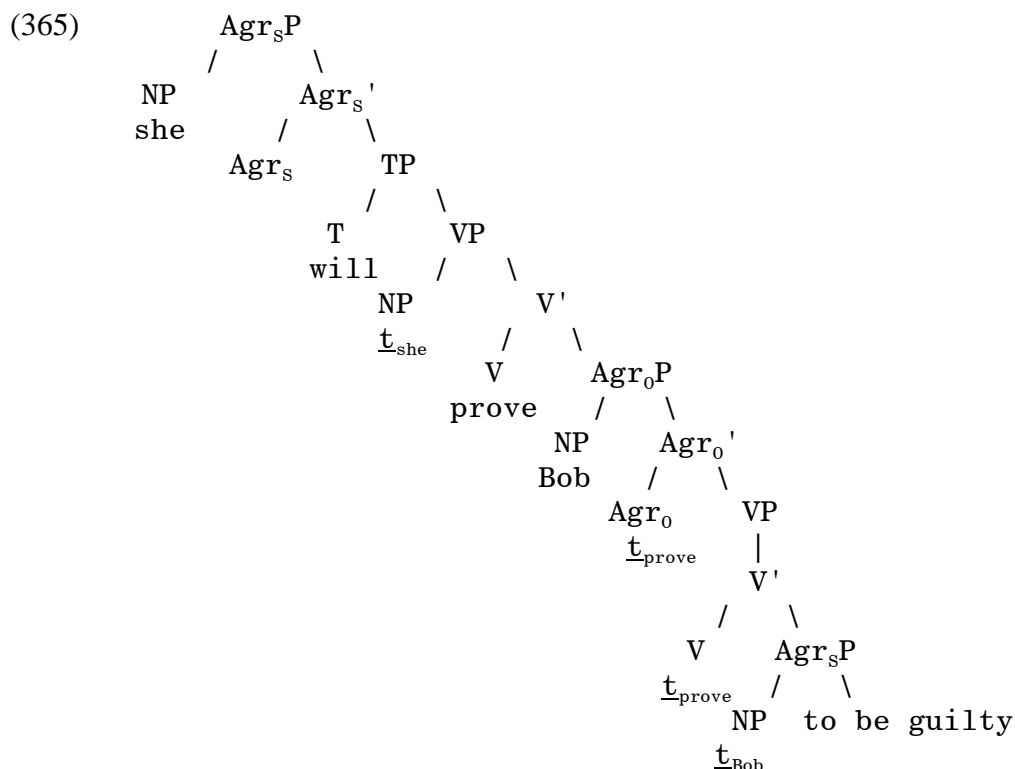
(366)  If the adverbials in (342)-(344) are attached in the vicinity of the lower matrix VP, the
        binding and licensing receive a natural account.

(367)  It is now natural to assume that the 'EPP' requirement driving raising to 'subject
        position' resides in Agr, hence is also responsible for raising to 'object position', under
        the assumption of Chomsky (1991) that 'Agr$_S$' and 'Agr$_O$' are merely mnemonic.

(368)  An additional argument for overt raising of an object or an ECM subject;
        Pseudogapping as VP ellipsis Jayaseelan (1990), with the remnant having raised to
        Spec of Agr$_O$, as discussed earlier.
(369)  Mary hired John, and Susan will ~~hire~~ Bill
(370)  The DA proved Jones (to be) guilty and the Assistant DA will ~~prove~~ Smith ~~(to be)~~
        ~~guilty~~

(371)  So object shift is possible.  Is it obligatory?
(372) *Joan believes him$_i$ to be a genius even more fervently than Bob$_i$ does
(373)  Joan believes he$_i$ is a genius even more fervently than Bob$_i$ does          Postal
        (1974)

(374) But there are arguments that object shift does not always take place.  [Based on Lasnik
        (1999a), Lasnik (2001c)]

(375) ?*Who was [a picture of t] selected
(376)   Who did you select [a picture of t]

(377) If object and subject both raise overtly, to [Spec, Agr$_O$] and [Spec, Agr$_S$] respectively, the CED, or whatever it follows from, cannot distinguish (375) from (376). Branigan (1992)

(378)  On the other hand, as already noted in Lasnik (1995b), when the object is a Pseudogapping remnant, extraction from it is seriously degraded:

(379)    Bill selected a painting of John, and Susan should ~~select~~ a photograph of Mary

(380) ?*Who will Bill select a painting of, and who will Susan ~~select~~ a photograph of

(381)    The special prosecutor questioned two aides of a senator during each other's trials

(382) ??Which senator did the special prosecutor question two aides of during each other's trials

(383)   Which senator did the special prosecutor question two aides of during the president's trial

(384)   The mathematician proved few theorems about Mersenne numbers during any of the lectures

(385)??Which  numbers did the mathematician prove few theorems about during any of the lectures

(386)   Which  numbers did the mathematician prove few theorems about during the conference lectures

(387) These paradigms argue, contra Lasnik (1995b), that when an object has overtly raised it **is** an island for extraction, and, therefore, since objects are not invariably islands, that such raising is optional.

(388)   Mary called up friends of John
(389) ?Mary called friends of John up      Johnson (1991)

(390)    Who did Mary call up friends of
(391) ?*Who did Mary call friends of up

(392)    Mary made John out [   to be a fool]
(393)    Mary made out [that John is a fool]
(394)    Mary made out [John to be a fool]      [Good for some speakers, as reported in Kayne (1985) and Johnson (1991).]

(395)   An observation about scope that Zubizarreta (1982) attributes to Chomsky, and that is discussed again by Chomsky (1995a), provides further evidence for the optionality of object shift with ECM subjects:
(396)a  (it seems that) everyone isn't there yet
     b  everyone seems [t̲ not to be there yet]
(397)  Chomsky (p.327) argues as follows: "Negation can have wide scope over the Q in [(396)a]... but not in [(396)b]", concluding that "...reconstruction in the A-chain does not take place, so it appears."

(398)   When the word order makes it clear that a universal ECM subject has raised, that subject cannot be interpreted inside the scope of negation in the complement clause, as seen in (399).
(399)  The mathematician made every even number out not to be the sum of two primes

(400)  The alternative word order for (399), with <u>every even number</u> unraised, does allow narrow scope for the universal (that is, for those that allow that order in the first place):

(401)  The mathematician made out every even number not to be the sum of two primes

(402)  I expected [everyone not to be there yet]      Narrow scope for ∀ possible, according to Chomsky (1995a) (and me).

(403)  I believe everyone not to have arrived yet

(404)  I proved every Mersenne number not to be prime

(405)  Everyone is believed not to have arrived yet

(406)  Every Mersenne number was proved not to be prime

(407)  Someone is likely to solve the problem

(408)  It is likely that someone will solve the problem

(409)  No large Mersenne number was proven to be prime

(410)  (409) cannot accurately be paraphrased by (411).

(411)  It was proven that no large Mersenne number is prime

(412)  Noone is certain to solve the problem

(413)  It is certain that noone will solve the problem

(414)  The DA made no defense witnesses out to be credible

(415)  The DA made out that no defense witnesses were credible

(416)  The DA made out no defense witnesses to be credible

(417)  The DA proved no defense witnesses to be credible

(418)  No defense witnesses were proved to be credible by the DA

(419)  **DIGRESSION** Why there should be no A-movement reconstruction is an interesting question. Chomsky (1995a) reasons that there is no actual process of reconstruction. Rather, the phenomenon is a consequence of the formation of operator-variable constructions. But given Chomsky's position that all movement leaves a copy, it is not clear how to limit reconstruction to A'-chains. One possibility, suggested in Lasnik (1999a), is that A-movement, unlike A'-movement, leaves no trace/copy behind.

(420)  Another possibility, even more speculative, is based on single cycle syntax. Suppose scope is established by QR, an instance of A'-movement. Suppose further that there is no literal Q-lowering. Then, to get embedded scope in, e.g., (412), QR would have to operate on the embedded cycle. But then subsequent raising to matrix subject position would constitute an instance of 'improper movement' from A'-position to A-position.

(421)  Matrix scope would cause no such problem. Its derivation would involve perfectly standard A-movement (raising) followed by A'-movement (QR).
       **END OF DIGRESSION**

(422)  Note that if the ECM subject has to be 'high' in order to license some element in the higher clause, then the lower reading for that ECM subject becomes impossible:

(423)  The DA proved no defense witnesses to be credible during any of the trials

(424)   With optionality of Object Shift now established, we must return to Postal's argument
         that it is obligatory:

(425) *Joan believes him$_i$ to be a genius even more fervently than Bob$_i$ does

(426)   It is not uncommon for Object Shift to be obligatory with pronouns in a language even
         when it is optional with lexical NPs.

(427)  Mary made John out to be a fool
(428)  Mary made out John to be a fool          [Good for some speakers.]

(429)   Mary made him out to be a fool
(430) *Mary made out him to be a fool           [Out for all speakers.]

(431)   For English, this might follow from the clitic nature of weak object pronouns, as
         suggested by Oehrle (1976), plus a structural locality requirement on cliticization.

(432)  The detective brought him in
(433) *The detective brought in him      Chomsky (1955)

(434)   One way to make the raising optional might be to abandon the idea that Agr$_O$ is the
         same item as Agr$_S$, assuming, instead, that only the latter obligatorily has an EPP
         feature.
(435)   Some of the discussion in Chomsky (1995a, p.350) hints at an alternative possibility.
         Chomsky reasons that "If Agr has no strong feature, then PF considerations, at least,
         give no reason for it to be present at all, and LF considerations do not seem relevant."
         He thus suggests, in passing, that "Agr exists only when it has strong features."
(436)   Along these lines, suppose, then, that the optionality of raising is the optionality of
         Agr$_O$.
(437)  This leaves us with the question of why Agr$_S$ is obligatory. This is exactly the question
         of why the standard EPP holds, still a mystery.

## Section 4
## What Kind of Constraint is the EPP?

### I. Background

(438)   Any sentence other than an imperative in which there is an S that does not contain a subject in surface structure is ungrammatical.  Perlmutter (1971, p.100)

(439)   The Extended Projection Principle (EPP) (there called by Chomsky 'principle P') "is the structural requirement that certain configurations ... must have subjects..." Chomsky (1981, p.27)

(440)a   It seems that John is here
     b *Seems that John is here

(441)   This did not follow from θ-theory, since even when the predicate has no subject θ-role to assign, a subject must nonetheless be present, at least in one class of languages.  "...the subject of a clause is obligatory in English and similar languages." [p.40]

(442)   Chomsky (1982) introduced the name 'Extended Projection Principle', since the requirement goes beyond anything demanded by the Projection Principle, "which states informally that the θ-marking properties of each lexical item must be represented categorially at each syntactic level...". [p.8]

(443)   Fukui and Speas (1986) (more recently followed by Epstein and Seely (1999), among others) propose that the effects of the EPP follow from a more general requirement, that a Case assigner must assign/check its Case (now sometimes called the Inverse Case Filter (ICF)). (440)b is out because Infl is unable to assign/check its Case. The EPP is redundant.

(444) Or is the ICF redundant?
        a. Is the ICF independently motivated?
        b. Is the EPP independently motivated?

(445)  Central examples like (440) are actually uninformative. True, they display redundancy, but they don't tell us how the redundancy ought to be eliminated.

(446) *Mary is believed [__ is intelligent]

(447)   "... movement is a kind of 'last resort.' An NP is moved only when this is required ... in order to escape a violation of some principle [such as] the Case filter ..."  Chomsky (1986b, p. 143)

        We must "prevent a nominal phrase that has already satisfied the Case Filter from raising further to do so again in a higher position."   Chomsky (1995a, p.280)

(448)"... a visible Case feature ... makes [a] feature bundle or constituent available for 'A-movement'.  Once Case is checked off, no further [A-]movement is possible." Lasnik (1995a, p.16)

(449) "If uninterpretable features serve to implement operations, we expect that it is
structural Case that enables the closest goal G to select P(G) to satisfy EPP by Merge.
Thus, if structural Case has already been checked (deleted), the phrase P(G) is "frozen
in place," unable to move further to satisfy EPP in a higher position. More generally,
uninterpretable features render the goal active, able to implement an operation: to
select a phrase for Merge (pied-piping) or to delete the probe." Chomsky (2000,
p.123)

(450)  All of these accounts demand that a Case assigner (checker) actually assign (check) its
Case, thus, they assume the ICF.

(451)  However, as observed by Nevins (2004), the Phase Impenetrability Condition will
independently block the illicit movement.

(452) *Eddie seems [to _] [that California is in political trouble]

(453)  No obvious solution to this one, but Nevins (2004), attributing the observation to Brent
DeChene, presents other rather similar instances of impossible A-movement, but
where ICF would not help:

(454) *Eddie was said [to _ ] [that California is in trouble]

(455)  On a pseudopassive derivation, the Case assigning property of the preposition should
be 'absorbed'. It is reasonable to conjecture that whatever rules out (454) could also
rule out (452).

(456)  *Mary loves here/there
(457)a  Mary loves it here/there
    b  Mary loves this/that place       Boskovic (2002)

(458)  A new argument for the ICF: Boskovic reasons that (456) are perfectly coherent (as
demonstrated by (457)), and are bad just because *here* and *there* can't bear Case.

BUT

(459)a   Mary found/discussed this place
    b  *Mary found/discussed here
    c (*)Mary found/discussed it here

(460)a    I talked about this place
    b  *I talked about here
    c (*)I talked about it here

(461)a  I love it when you sing
    b  I love when you sing       (Lydia Grebenyova p.c.)

(462)  Thus, independent motivation for the ICF is much less clear than might have been
expected. In fact the strongest remaining argument might be the account in the
preceding section of the ungrammaticality of long Pseudogapping.

(463)   Note also that under an Agree-based theory of Case, the ICF could never actually force movement of a DP to the Spec of a Case-licensing head, since first, Agree could take place before movement, and second, Agree could not take place after movement.

(464)   There are situations where neither θ-theory nor Case theory demands a subject, yet one is apparently still required (even if the result is ungrammatical; i.e., with or without a (pleonastic) subject, the sentences are bad).

(465)   *the belief [   to seem [Peter is ill]]
(466)   *[   To seem [Peter is ill]] is widely believed
(467)   *John has conjectured [   to seem [Peter is ill]]   Boskovic (1997)

## II. ECM configurations and the EPP

(468)   Standard ECM constructions, on their standard analysis, initially look like powerful evidence for the EPP, until we recall the Postal and Lasnik-Saito arguments that the ECM subject is not in Spec of the lower clause, but rather is in Spec of $Agr_O$ in the higher clause, arguably a canonical accusative Case position.

(469)   ON THE OTHER HAND, as discussed above, there is considerable evidence that the ECM subject need not raise, i.e., that it can remain in Spec of IP (since it is not in its base thematic position).  That is, ECM constructions do after all provide an argument for the EPP.

## III. Binding theoretic evidence for the EPP

(470)   The 'Governing Category' for Condition A is based on 'clause-mate'.        Lasnik (2002b), Postal (1974)
(471)a    Jack made himself out to be immoral
     b ?*Jack made out himself to be immoral
(472)a    They made each other out to be honest
     b ?*They made out each other to be honest

(473) ?Jack called up himself
(474) ?They called up each other      [These seem not as bad as (471)b and (472)b.]

(475)   John appears to Mary to seem to himself/*herself to be the best candidate   [pointed out to me in this connection by Adolfo Ausín; also attributed to Danny Fox, via David Pesetsky, in Castillo et al. (1999)]
(476)   This argues, contra Fukui and Speas (1986) and Epstein and Seely (1999), that A-movement is successive cyclic. But what could drive 'intermediate' A-movement if not the EPP?

(477) The 'Governing Category' for Condition B is based on 'clause-mate     Lasnik (2002a) [But see Fiengo and May (1994) for an alternative take.]

(478)   *John$_i$ injured him$_i$
(479)   *John$_i$ believes him$_i$ to be a genius

(480)  *Mary injured him$_i$ and John$_i$ did too
(481)  ?Mary believes him$_i$ to be a genius and John$_i$ does too

(482)  How can VP deletion (presumably a PF operation) repair a Condition B violation
       (presumably an LF constraint)?

(483)  Suppose Postal (1966; 1974) was right (contra Chomsky (1973)) that the relevant
       structural configuration for such obviation is based on the notion clause-mate.  (For
       related discussion, see Lasnik (2002b))

(484)  Weak pronouns must cliticize onto the verb.   Oehrle (1976)
(485)  The detective brought him in
(486)  *The detective brought in him      Chomsky (1955)

(487)  Failure to cliticize in (481) is repaired by ellipsis.
(488)  In (480), on the other hand, the pronoun and its antecedents are clause-mates
       independent of cliticization.

(489)  ?*John$_i$ injured him and Bill$_i$
(490)  ?John$_i$ believes him$_i$ and Bill to be geniuses

(491)  ( )John$_i$ made him$_i$ and Bill out to be geniuses
(492)  ( )John$_i$ made out him$_i$ and Bill to be geniuses

(493)  Now given that Condition B relies on a clause-mate characterization of GC, the
       following example, the Condition B version of (475), argues for successive cyclic A-
       movement, hence for the EPP:
(494)  *John$_i$ appears (to Mary) [ to seem to him$_i$ [ to be the best candidate]]

(495)  Potential problem, pointed out by Tom Roeper: In just those VP ellipsis situations
       where Condition B effects are ameliorated, so are Condition C effects.  But this is
       unexpected since Condition C involves no locality, clause-mate or otherwise.  A
       relevant example, parallel to (481) above, is the following:

(496)  ??Mary believes John$_i$ to be a genius and he$_i$ does too

Compare:

(497)  *He$_i$ believes John$_i$ to be a genius

(498)  And even though Condition C involves no locality, once again, we find amelioration
       only in non-local domain:

(499)a   *Mary injured John$_i$ and he$_i$ did too
     b   *He$_i$ injured John$_i$

(500)  Perhaps this is not really so surprising, as Condition C effects often disappear under
       ellipsis.  Another example is:

(501)a   Mary thinks John$_i$ is a genius and he$_i$ does too
     b   *He$_i$ thinks John$_i$ is a genius

(502)   It was facts like this that provided much of the motivation for the 'Vehicle Change' of Fiengo and May (1994).  Fiengo and May show how + and –pronominal correlates can be equated for the purposes of ellipsis.  Thus a name [–a, –p] and corresponding pronoun [–a,+p] count as identical.  Fiengo and May's treatment is in terms of an LF copying theory of ellipsis, but nothing crucial changes if the equivalence is stated in terms of identity deletion.

(503)   We now have a handle on the parallelism between Condition B and apparent Condition C in ellipsis contexts - (481) vs. (496).  Even in the latter circumstance, the subject of the infinitival clause could actually be the pronoun *him*.  The two examples then become identical for our purposes: It is failure of *him* to cliticize that is remediated by deletion.

(504)   There are contexts where pronouns are disallowed, yet we still get apparent Condition C amelioration (a phenomenon noticed by Christopher Potts, and brought to my attention by Jason Merchant). The following is an example (though not of precisely a type discussed by Potts).

(505)   *He$_i$ said that I should show Susan John$_i$

(506)    Mary said that I should show Susan John, but he didn't ~~say that I should show Susan John/him~~

(507)   *(He didn't say that) I should show Susan him

(508)   Potts's point was that vehicle change won't account for the Condition C amelioration this time, since a pronoun in place of the name is still bad (though for other reasons).

(509)   In this instance, the other reasons could be exactly what I appealed to earlier - the clitic nature of weak accusative pronouns. In that case, vehicle change <u>would</u> give the desired result.

(510)   (507) then violates this PF requirement, and VP ellipsis deletes the PF violation.

(511)  Mary showed Susan Bill$_i$ even though he$_i$ didn't want her to.
                                        (Jason Merchant, attributed to Chris Potts)

(512) *He$_i$ didn't want Mary to show Susan Bill$_i$

(513) *He didn't want Mary to show Susan him

(514) *Mary showed Susan him

## IV. Repair of EPP violations?

Merchant pp. 185-193

(515)   *Which Marx brother did she say that [[a biography of _] is going to be published this year]

(516)   *Which Marx brother did she say that [[a biography of _] will appear this year]

(517)   A biography of one of the Marx brothers is going to be published this year - guess which!

(518)   A biography of one of the Marx brothers will appear this year - guess which!

(519)   *Which Marx brother did she say that [a biographer of _] worked for her

(520)    A biographer of one of the Marx brothers worked for her, but I don't remember which

(521)   Subject position is an island.  But there is a potential source for the sluices where the extraction is not out of 'subject position', roughly as in:

(522)   *Which candidate were [posters of *t*] all over town
(523)    Which candidate were there [posters of *t*] all over town

(524)  *Which candidate did they say [to get *t* to agree to a debate] was hard
(525)   Which candidate did they say it was hard [to get *t* to agree to a debate]

(526)   Guess [which Marx brother]₂ [~~IP~~ ~~_ is [~~VP~~ going to be published [a biography of *t₂*]]]~~
(527) *Guess [which Marx brother]₂ [IP _ is [VP going to be published [a biography of *t₂*]]]

(528)   (527) violates the EPP, so why is (526) good?  Infl has a strong EPP feature, where 'strong' means uninterpretable at the PF interface.  If, as a result of deletion, the strong feature does not reach the PF interface, then the absence of checking movement should not matter.  According to Merchant, that's what happens in the Sluicing examples.

**V. The nature of the EPP**   [Based on Lasnik (2001b)]

(529)  Certain heads have  a strong feature, demanding overt movement for checking.
       Chomsky (1995a)
OR
(530)  Certain heads require Spec's.   Chomsky (2000), Chomsky (1981)

(531)
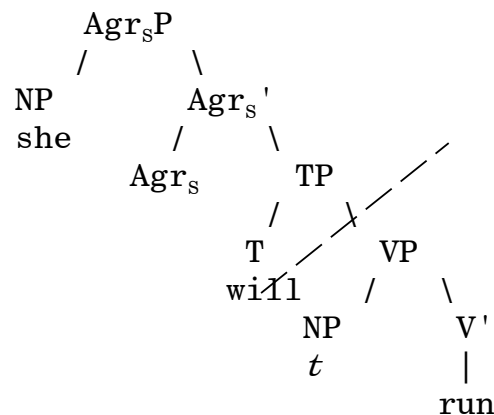


(532)   Mary said she won't run, although she will ~~run~~

(533)
```
                      Agr_S P
                          \
                        Agr_S '
                        /    \
                    Agr_S      TP          /
                  [strong F]  /      ___/
                            T /    /\
                          will  /    \
                              NP      V'
                             she       |
                             [F]      run
```
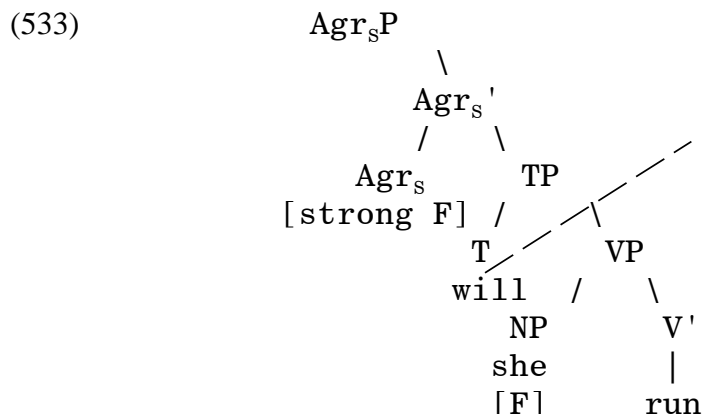
(534) *Mary said she won't run although will ~~she run~~

(535)   Agr (or T) requires a Spec.  It does not suffice to check its 'EPP feature' (analogous to the treatment of Pseudogapping in Section I).

(536)   So can violations of this version of the EPP be repaired? That would actually be consistent with Merchant's discussion, and also with the argument just above (since Infl survives the ellipsis, so the EPP violation persists).

(537)   [Every biography of one of the Marx brothers]$_1$ seemed to its$_1$ author to be definitive, but I don't remember which (Marx brother)

(538)   Here, there must have been raising in the sluice in order for the bound pronoun to be licensed. Merchant proposes that the relevant raising is covert.
 BUT
(539)a.  The DA made every defendant$_1$ out to be guilty during his$_1$ trial
     b.*The DA made out every defendant$_1$ to be guilty during his$_1$ trial
                                        Lasnik (2001c), Lasnik and Park (2003)

(540)   Covert A-movement should be able to turn (539)b into (539)a in LF.
(541)   Or maybe not. Craenenbroeck (2004) and Craenenbroeck and Dikken (2005) show that under the Lasnik theory of optionality of object shift, (539)b would necessarily lack the Agr$_O$ projection that (539)a would necessarily have (the EPP requirement of Agr$_O$ driving the movement). So the relevant covert movement could not take place.

(542)   However, Craenenbroeck and Dikken (2005), while rejecting the Lasnik and Park (2003) argument that there is no covert A-movement still accept its conclusion (on another basis):
(543)   If the EPP is a PF requirement (which they assume, following Merchant), then it should never drive covert movement at all. Hence, there is, in fact, no covert A-movement.

(544)   So why is (537) good? Craenenbroeck and Dikken (2005) (continuing to assume that Subject Condition violations cannot be repaired by ellipsis, and EPP violations can) claim that it is QR that is responsible for the binding of *its* in (537).

(545)   But Merchant had already convincingly rejected that possibility, pointing out that A'-movement of the quantifier (unlike A-movement) would create a Weak Crossover configuration.

COMPARE
(546) *It seems to its_i author that every book_i is definitive
OR EVEN
(547) *Its_i author completed every book_i rapidly

(548)   Further, while there may have been doubt about whether A-movement is what is
          needed to license a bound variable pronoun, there is surely no doubt that Condition A
          demands A-binding. Yet ...

(549)  Students of a certain linguist seem to themselves to be geniuses, but I won't tell you
          which linguist

(550)   So if there is no covert A-movement, then it must be that there is overt A-movement
          in this example, and in (537) as well (given Merchant's argument that A'-movement
          won't suffice).

(551)   Thus, Subject Condition violations can be repaired. There is then still no evidence that
          EPP violations can.

(552)   John-ga  subete-no gakusei-o_i  soitu-no_i sensei-ni    syookaisita
              -Nom  all-gen  student-acc  he-gen   teacher-dat  introduced
          'John introduced every student_i to his_i teacher

(553) *John-ga  soitu-no sensei-ni     subete-no gakusei-o  syookaisita
              -Nom  he-gen  teacher-dat  all-gen    student-acc introduced

(554)   Short scrambling is (or can be) A-movement. If there were covert A-scrambling, then
          (553) should be as good as (552).  Takano (1998)

(555) ?*[[otagai_i  -no  sensei]-ga   karera_i-o  hihansita] (koto)
          each other-gen teacher-nom them-acc  criticized  fact

(556) ?[karera_i-o [[otagai_i   -no    sensei]-ga   t_i   hihansita]] (koto)
          them-acc  each other-gen teacher-nom    criticized  fact                        Saito (1994)
(557)   Covert A-scrambling, if it existed should remedy the Condition A violation.

## VI. An argument against the EPP?

(558)   Epstein and Seely (1999; 2006) offer a conceptual/technical argument against the
          EPP: The EPP demands successive cyclic A-movement, thus creating a chain.
          According to Chomsky (1995a), a chain is a set of 'occurrences' where each
          occurrence is defined in terms of sisterhood.  Since an EPP position is a Spec of some
          X, its sister is X', an intermediate projection of X.  But it is widely assumed that
          syntactic operations can't target intermediate projections.  Therefore the needed chain
          links can't exist, so the EPP must not be valid.

(559)   Possible responses:
(560)   Is it completely clear that syntactic operations can't target X'?  I actually believe that
          the assumption is correct, but it is interesting to note that very little actual evidence
          has been offered in the literature.

(561)   Why <u>must</u> occurrences be defined in terms of sisterhood?  Motherhood would seem to work equally well, and avoid any question of intermediate projections.

Most importantly:

(562)   Epstein and Seely assume, completely reasonably, that chains are representational objects, existing at the ends of derivations.  At that point, it is certainly true that most of the occurrences constituting a chain are intermediate projections.  However, this has no consequences for the EPP per se.

(563)   There is no a priori reason to assume that the EPP requirement must be met at the end of the derivation.  Rather, it might be viewed derivationally. In fact, this seems natural, given that the only alternatives are an LF constraint or a PF one. Yet semantically null elements (pleonastics) and phonetically null elements (PRO, pro) can satisfy it.

(564)   But then, assuming standard bottom-up structure building, at the point where the EPP will be satisfied, the moving DP will be targeting a maximal projection - the entire existing structure.   Lasnik (2003)

(565)   Note that this would entail that EPP violations cannot be repaired, if, as argued in Section V, the EPP is not a matter of strong feature checking.

**Section 5**
**Case Filter Violation Repair by Ellipsis?**

**I. The Case Filter**
 **A.  Amelioration of a constraint on Japanese ga/no conversion**

Saito (2001)

(566)  Taroo-ga  / -no  itta tokoro
          -NOM   -GEN went place
    'the place where Taroo went'


(567)  A Case-marked object blocks ga/no conversion.


(568)  Taroo-ga /*-no  hon -o      katta  mise
          -NOM/ -GEN book-ACC bought shop
    'the shop where Taroo bought a book'


(569) An object relative gap does not block ga/no conversion.


(570)  Taroo-ga /-no  e katta hon
          -NOM -GEN   bought book
    'the book that Taroo bought'


(571) A null object does not block ga/no conversion.


(572) Hanako-ga /*-no  Ziroo-o  tureteiku tokoro-wa  Nagoya-zyoo -desu
          -NOM  -GEN      ACC take     place -TOP Nagoya Castle is
    'The place that Hanako is taking Ziroo is the Nagoya Castle.'

(573) Hanako-ga / -no   e  tureteiku tokoro-wa  Nagoya-zyoo -desu
          -NOM  -GEN      take     place -TOP Nagoya Castle is
    'The place that Hanako is taking (him) is the Nagoya Castle.'

(574)  If relative gaps can be null pronouns, as argued for by Perlmutter (1972), Murasugi
           (1991), then these two instances are one.
(575)  Now suppose these null pronouns are actually the results of ellipsis.  Then if the
           blocking effect is the result of accusative Case checking, failure to check can be
           repaired by deletion.


 **B. A kind of exceptional Case marking normally available only under A'-movement**

(576)  *I alleged John to be a fool

(577)   Verbs of this class cannot normally license 'exceptional' Case

(578)  ?John, I alleged to be a fool
(579)  ?Who did you allege to be a fool
(580)  But they can under A'-movement (as first discussed by Kayne).

(581)  John, I alleged to be a fool.  *Mary alleged John to be a fool too.

(582)   A. John, I alleged to be a fool.   B. Mary did [allege John to be a fool] too.

(583)   <u>John</u> in (582)B should be in violation of the Case Filter, but it is fine, evidently
         repaired by deletion.  This, along with Saito's analysis above, suggests the early
         version (Chomsky (1980)) of Case theory, where the Case Filter reflects a morpho-
         phonological requirement (rather than an LF 'visibility' requirement).

(584)  There are two possible alternative analyses of (582) that should be considered, since if
         either is tenable, the argument for Case Filter repair is undermined.

(585)   The first alternative relies on the proposal of Merchant (2001) that there is no formal
         identity requirement for ellipsis, just a purely semantic one. Under this approach to
         ellipsis, the elided material in (582) could be *allege that John was a fool*, rather than
         the indicated infinitival.

(586)   However, there is reason to believe that formal identity is at least to some degree
         relevant in licensing ellipsis. One such reason is provided by Merchant himself.
         Active-passive pairs typically do not alternate:

(587)   *Someone shot Ben, but I don't know by whom [Ben was shot t]

(588)   In the absence of any formal identity condition, it is not clear why ellipsis is not
         possible here. Merchant proposes that the subject of the active transitive induces
         relevant entailments that the <u>by</u>-phrase does not. This might turn out to be the right
         direction, but as it stands, it is just a promissory note. [And, in fact, this position is
         rejected by Merchant (2005; 2008), as discussed in Part 2, Section VI above.]

(589)   There are other residues of formal identity. One is the fact that for many speakers,
         sloppy identity is disfavored if there is a mismatch of agreement features:

(590)   ??Mary washed her car and John did [wash his car] too

(591)   The second is the restriction on VP ellipsis with forms of <u>be</u> discussed above and
         illustrated here:

(592)   *Mary is a doctor and John will [be a doctor] too

(593)   Here again it is hard to see how any semantic identity could be at issue.

(594)   The second alternative is based on the observation that while the *allege* class of verbs
         do not license Case on full DPs, they do on weak pronouns (perhaps via
         incorporation):

(595)   I alleged *John/?him to be a fool

(596)   The elided material in (582) could then be *allege him to be a fool*, once again
         obviating any Case difficulty even without ellipsis.

(597)   Even accounts of ellipsis demanding formal identity necessarily allow this kind of
         'vehicle change' in the sense of Fiengo and May (1994).

(598) But this kind of account cannot cover examples like (599).

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(599)  His<sub>i</sub> mother, John alleged to be beautiful. Bill did too.

(600)  Tomo Fujii observes that sloppy identity is possible here, unexpected if the elided
         material were simply *allege her to be beautiful*.

(601)  Another kind of example due to Kayne is also relevant in this connection:

(602)a   John, I assure you to be the be the best candidate
      b  *I assure you John to be the best candidate

(603)  *I assure you him to be the best candidate

(604)  John, I assure you to be the best candidate, and Mary will too

**Section 6**
**More Sluicing Repairs**

**I. Multiple Sluicing**

(605)   Not surprisingly, in languages with multiple wh-fronting (such as Bulgarian and
        Serbo-Croatian), multiple Sluicing (Sluicing with multiple survivors) is possible:

(606)   Njakoj   vidja njakogo, no ne  znam   koj kogo  ~~[vidja]~~
        someone  saw someone but  not I-know  who whom  (saw)          Bulgarian
                                                                Richards (1997)

(607)   Neko    je vidio nekog,  ali ne znam   ko    koga  ~~[je vidio]~~
        someone is   seen someone but not I-know  who   whom (is seen)   Serbo-Croatian
                                                                Stjepanovic (2003)

(608)   Surprisingly, at least some multiple Sluicing is allowed in at least some **non**- multiple
        wh-fronting languages:

(609)   I know that in each instance one of the girls got something from one of the boys.
          ?But which from which                                    Bolinger (1978)

(610)   I know that in each instance one of the girls got something from one of the boys.
          ?But they didn't tell me which from which                 Nishigauchi (1998)

Compare:

(611)     *They didn't tell me which from which got something

A further example:

(612)    ?One of the students spoke to one of the professors, but I don't know which to which

(613)    *One of the students spoke to one of the professors, but I don't know which to which
         spoke

(614)   Richards (1997), Richards (2001) offers an intriguing account of this surprising
        possibility, involving a sort of repair by ellipsis, of these apparent multiple sluicing
        constructions:

(615)   PF must receive unambiguous instructions about which part of a chain to pronounce
        (and only a single member of the chain will be pronounced).

(616)   A strong feature instructs PF to pronounce the copy in a chain in which it is in a
        feature-checking relation.

(617)   Suppose a weak feature overtly attracts an item. The resulting chain would then
        contain two members, with no instruction about which to pronounce. The derivation
        crashes at PF.

(618)   When the attracting feature is strong, PF is instructed to pronounce the head of the
        chain.

(619)   As Richards notes, his approach does not absolutely bar overt weak feature driven
        movement. Suppose a weak feature drives movement out of what will become an
        ellipsis site. In this case PF only has to consider a single position for pronunciation
        (the head of the chain), since nothing in the ellipsis site will be pronounced.

(620)   This is the basis of Richards's analysis of apparent multiple sluicing in languages
        lacking overt multiple wh-movement. Richards gives the following example, adapted
        from Bolinger (1978):

(621)   I know that in each instance one of the girls got something from one of the boys. But they didn't tell me which from which.

(622)   I know that in each instance one of the girls got something from one of the boys. *But they didn't tell me which from which got.

(623)   In a language like English, some of the features on $C^0$ driving wh-movement are weak. (622) is correctly ruled out, as the representation will contain two copies of the second wh-phrase, with no instruction as to which to pronounce.

(624)   When the IP is elided, as in (621), the wh-chain will be legitimate, containing only a single candidate for pronunciation.

(625)   Merchant (2001) offers a rather similar account: Procrastinate is a 'local' requirement, encoded as a feature of a trace. Moving overtly when covert movement would have been possible leaves this feature on the trace (perhaps ultimately resulting in a PF crash). If the IP containing the trace is deleted, the defective feature is no longer present at the PF interface, so the violation is repaired.

(626)   Nishigauchi (1998), on the other hand, concludes that these are not really multiple sluicing: While the first wh-phrase is in Spec of CP, the second occupies some other position.

(627)   "One striking fact about multiple sluices in the languages above is that they tend not to be separated by a tensed clause boundary..."        Merchant (2001)

(628)   Which one of the professors did the students say that Mary spoke to

(629)   The students said that Mary spoke to one of the professors, but I can't remember which professor ~~the students said that Mary spoke to~~

(630)   *One of the students said that Mary spoke to one of the professors, but I don't know which student to which professor

(631)   As mentioned earlier, in languages with multiple wh-fronting (such as Bulgarian), multiple sluicing (sluicing with multiple survivors) is rather freely possible, as seen in the following two examples from Richards (1997), and Stjepanovic (2003) respectively:

(632)   Njakoj    vidja njakogo, no  ne  znam    koj  kogo  ~~[vidja]~~
        someone  saw  someone  but not I-know  who  whom  (saw)          [Bulgarian]

(633)   Neko    je vidio nekog,  ali ne  znam   ko    koga   ~~[je vidio]~~
        someone is  seen someone but not I-know who   whom   (is seen)     [Serbo-Croatian]

(634)   The important question now is whether such multiple sluicing is possible across a clause boundary. I do not yet have a great deal of data, but what I do have is suggestive. One of my two Serbo-Croatian informants reports that the following example is quite good (though perhaps a shade short of perfect):

(635)   a. Neko      misli da  je Ivan nesto      pojeo.
            someone thinks that is Ivan something ate
            'Someone thinks that Ivan ate something.'
        b. ?Pitam se  ko   sta.
            Ask   self who  what
            'I wonder who what.'

(636)   However, the second informant rejects the example. Perhaps significantly, these
        judgments track their judgments for multiple wh-movement <u>without</u> sluicing. The first
        speaker accepts the following example while the second rejects it:

(637)    Ko  sta   misli  da  je Petar pojeo?
         who what thinks that is Petar eaten
         'Who thinks that Petar ate what?'

(638)   Another requirement on the English construction: The second <u>wh</u> strongly prefers to
        be a PP:

(639)    ?Someone talked about something, but I can't remember who about what
(640)   ?*Someone saw something, but I can't remember who what

(641)    ?Mary showed something to someone, but I don't know exactly what to whom
(642)   ?*Mary showed someone something, but I don't know exactly who what

(643)   This combination of constraints is reminiscent of what we find in rightwards focus
        movement.

(644)   "Right Roof Constraint"
        Any rule whose structural index is of the form ... A Y B, and whose structural change
        specifies that A be adjoined to the right of B, is upward bounded.    Ross (1967)

(645)   The superior acceptability of PP over DP as the second wh-remnant is also similar to
        what is found with rightwards movement.

(646)   a.  Some students met yesterday with the professors
        b.*Some students met yesterday the professors

(647)   'Heaviness' is a factor in extraposibility, as discussed by Ross (1967) and Fiengo
        (1980) among many others. However, that requirement seems limited to situations
        where it is a DP that tries to extrapose:

(648)   a. *Mary saw yesterday Harry
        b.  Mary saw yesterday her old friend Harry
        c.  Mary saw yesterday Harry Hetherington
(649)    Mary spoke yesterday to him

(650)   Multiple sluicing tracks extraposition quite well:

(651)   a.  Who was talking yesterday to who
        b.  Someone was talking (yesterday) to someone, but I don't know who to who
(652)   a. ?*Who bought yesterday what
        b. ?*Someone bought something, but I don't know who what
(653)   a.  Which linguist criticized yesterday which paper about sluicing
        b. ?Some linguist criticized (yesterday) some paper about sluicing, but I don't know
        which linguist which paper about sluicing

(654)   Finally, rightwards DP movement is well known not to affect the object of a
        preopsition, as first discussed by Ross (1967):
(655)   *A linguist spoke about yesterday a paper on sluicing

Compare:
(656)    A linguist criticized yesterday a paper on sluicing

(657)   The second <u>wh</u> in multiple sluicing seems subject to the same constraint:
(658)    Some linguist spoke about some paper on sluicing, but I don't know which linguist
         ?*(about) which paper on sluicing

(659)    There are certain exemptions to the Right Roof Constraint. One involves control
         clauses:
(660)    ?Mary wanted to go until yesterday to the public lecture
(661)    Significantly, apparent multiple sluicing tracks both the constraint and the
         exemption quite well:
(662)   *Some of the  students  wanted John to go to some of the lectures, but I'm not sure
         which to which
(663)   ?Some of the  students  wanted to go to some of the lectures, but I'm not sure which to
         which

(664)   All of this is quite suggestive that the second wh in these multiple constructions has
         actually undergone extraposition, rather than wh-movement.

OR
(665)   Fox and Pesetsky (2003) propose that at each spell-out domain, linear ordering
         statements are added to an ever growing Ordering Table.
(666)   When ellipsis takes place, it can have a salvation effect by eliminating all statements
         involving deleted material, including the contradictory statements that can result from
         moving too far. Island violation repair is one such situation; possibility of multiple
         wh-fronting is another (similar to the account of Richards mentioned earlier).
(667)   When two wh-phrases are not phase mates, they are not ordered directly. Rather, their
         relative order is determined by transitivity via elements at the edge of the intervening
         phases. "If these connecting links are deleted, phonology doesn't know what to do
         with the remaining elements." Thus, we get a phasemate condition on multiple
         sluicing, accounting for the clausemate effects seen earlier.
(668)   The F&P account, unlike the Right Roof one, would allow multiple sluicing even out
         of an embedded clause, as long as the two wh-phrases both originate in the same
         embedded clause (at which point their linear ordering would be directly established).

(669)    Fred thinks a certain boy talked to a certain girl.
          I wish I could remember which boy to what girl
(670)    A certain boy said that Fred talked to a certain girl.
          *I wish I could remember which boy to what girl

On the other hand, suppose that the source of the sluice in (669) is actually (671)a rather than
(671)b.

(671)   a.  I wish I could remember which boy talked to what girl
         b.  I wish I could remember which boy Fred thinks talked to what girl

(672)   This would require a sort of accommodation, since it was never actually asserted that
         a boy talked to a girl, merely that Fred thinks that it happened.

(673)   When accommodation is more difficult, multiple sluicing seems considerably less available:

(674)      Fred denied that a certain boy talked to a certain girl.
           ???I wish I could remember which boy to what girl

(675)   Standard simple sluicing is not adversely affected:

(676)   Fred denied that a certain boy talked to a certain girl
           a. I wish I could remember which boy
           b. I wish I could remember what girl

(677)    Fred doubts that a certain boy talked to a certain girl.
           ?*I wish I could remember which boy to what girl
(678)a.   I wish I could remember which boy
      b   I wish I could remember what girl

(679)   An anaphor binding test: (680) indicates that the remnant remaining after sluicing can contain an anaphor, bound via 'reconstruction', whose antecedent was in the deleted context.
(680)    ?Everyone said that some pictures of himself hung on certain walls, but I'm not sure how many pictures of himself
(681)      With multiple sluicing, however, acceptability degrades considerably:
(682)    ?*Everyone said that some pictures of himself hung on certain walls, but I'm not sure how many pictures of himself on which walls

(683)   Potential problem:

(684)   Who$_i$ did Mary talk to $t_i$ $t_j$ yesterday [about phonology]$_j$
(685)   I know who Mary talked to yesterday about phonology,
           ?*but I don't know who about semantics

(686)   I know that in each instance one of the girls got something from one of the boys. But they didn't tell me which from which

(687)   Possibly the 'normal' rightwards focus site is not high enough to escape deletion under sluicing, and only a WH-element can move high enough (i.e., into essentially the same kind of geometric relation with a wh-Comp that Spec of such a Comp has, as suggested to me by Milan Rezac).

(688)   There is clear evidence that deletion can repair island violations. There is also evidence that deletion can repair a derivation where a normally obligatory movement fails to take place. Lasnik (1995b), Lasnik (1999b), Lasnik (2001d). It remains an open question whether moving a normally non-movable item can be so remedied.

(689) Big remaining question: Why can't Right Roof violations be repaired by ellipsis?

**Appendix: On the Right Roof Constraint**

(690)   "Why should rules which adjoin terms to the right side of a variable be upward
        bounded, and not those which adjoin terms to the left of a variable?"  Ross (1967)

(691)   Chomsky (1973) offers an account for the asymmetry, in terms of his theory in which
        all movement is bounded, but can (sometimes) proceed successive cyclically,
        resulting in the appearance of unbounded movement. Chomsky argues that the
        "asymmetry of boundedness follows from the asymmetry of the Complementizer
        Substitution Universal":

(692)   Only languages with clause-initial COMP permit a COMP-substitution transformation
        [i.e., wh-movement]    [the Bresnan (1970) reformulation of the Q-Universal of
        Baker (1970)]

(693)   Chomsky's formulation of Subjacency is such that items that move to COMP escape
        this boundedness. Further, given other of the Chomsky (1973) conditions, an item in
        COMP can move upward only to another COMP position. Thus, "it follows that there
        can be, in effect, unbounded movement [only] to the left by iteration of
        Complementizer Substitution."

(694)   There are three salient derivations potentially available.
        a. One fell swoop rightwards movement, which will (generally) be straightforwardly
        excluded by Subjacency.
        b. Successive adjunction. This will generally be ruled out by the formulation of
        Subjacency, which permits escape only via COMP.
        c. Successive movement via COMP until a final step of rightwards movement will
        also be excluded by the requirement that movement from COMP can only be to
        another COMP.

(695)   Needless to say, this account relies on key stipulations. It will therefore be of interest
        to consider alternatives.

(696)   Preventing the one fell swoop derivation is the least problematic aspect. Some version
        of Subjacency (or the Phase Impenetrability Condition) is still relevant. Another
        possibility is the Fox-Pesetsky approach, though only for situations where the item to
        be moved is not rightmost in the entire structure to begin with, as far as I can tell.

(697)   The second sort of derivation mentioned above, successive cyclic leftward movement
        followed by a final step of rightward movement can be very nicely handled by Fox-
        Pesetsky. All of the leftward movements will be fine, but the final rightward step will
        yield linear ordering statements that conflict with those already created.

(698)   Perhaps most problematic is successive rightwards movement, which might be
        expected to be just like its mirror image successive leftwards movement. Note that the
        precedence statements successively created will never be contradicted by later ones.

(699)   Here I offer a speculation about that problematic derivation, relating it to abstractly
        similar illicit derivations in the realms of wh-movement and A-movement.

(700)   One long-standing problem with wh-movement (discussed by Lasnik and Saito
        (1984) and Epstein (1992) among many others) is that once a wh-phrase has moved to
        the Spec of an interrogative C, it can move no further, as illustrated in (701), where
        <u>what</u> has moved through the CP, Spec just under <u>wonder</u>.

(701)   *What did you wonder [ $t$ [ John bought $t$]]

(702)   Intuitively, the moving wh-phrase is trying to reach an appropriate position; once it does it is stuck there. A-movement is known to behave is similar fashion. Overwhelmingly, A-movement from a characteristic Case-checking position is barred:

(703)   *Mary is believed [ *t* is a genius]

(704)   *John seems to *t* [that Bill is the best candidate]

(705)   "... movement is a kind of 'last resort.' An NP is moved only when this is required ... in order to escape a violation of some principle [such as] the Case filter ..."  Chomsky (1986b, p. 143)

(706)   "[We must] prevent a nominal phrase that has already satisfied the Case Filter from raising further to do so again in a higher position."   Chomsky (1995a, p.280)

(707)   Here again, once movement has reached a designated type of position, no further movement (at least of the same type) is possible.

(708)   Speculation: Successive cyclic rightwards movement, at least in English, falls under the same generalization.

(709)   Rightwards movement in English is focus movement, as discussed by Rochemont (1980), among many others.

(710)   Thus, the very first movement will be to the designated position type - focus, so no further (focus) movement will be allowed, just as no further wh-movement was allowed in (701) and no further A-movement was allowed in (703) and (704).

(711)   One significant question still remains. I have argued for a rightwards movement account (i.e., of the second wh-phrase) of apparent multiple sluicing in English based on Right Roof effects. However, since sluicing repairs a variety of violations, as discussed earlier, the mystery now is why the Right Roof violation of one fell swoop movement (when the second wh-phrase is originally rightmost in its own clause) cannot be repaired.

(712)   Possibly all that can be said at this point is that different operations have different repair potential. I will try to do slightly better than that, relating this problem to one that arose in my treatment of overt object shift in Lasnik (2002d).

(713)   There the question was why pseudogapping (which I analyzed as VP ellipsis following A-movement of the survivor) cannot repair overly long A-movement, thereby falsely allowing examples like (714):

(714)   *Susan thought Mary studied Bulgarian and John did ~~think Mary studied~~ Macedonian

(715)   I proposed that this falls under the prohibition of A-movement from a Case position. This was based on the arguments of Lasnik (2001c) that base direct object position is a Case position; raising to Spec of $Agr_O$ is not crucial for accusative Case licensing.

(716)   Now notice that rightwards movement is not the only focus strategy in English; focus in situ is also available. But then for a focused element, even if it does not undergo a short initial step of rightwards movement, movement to a distant focus position will still be disallowed.

(717)   The final question is parallel to the final question that arose for my A-movement analysis of pseudogapping: Since direct object begins in a Case position, how is it ever permitted to undergo A-movement to Spec of $Agr_O$? The parallel question here is: Since a focused element in situ is already in a focus position, how is rightwards movement <u>ever</u> possible?

(718)   In both instances, long movement is blocked, but short movement is allowed. My
        speculation about A-movement can carry over to rightwards movement:

(719)   The permitted short cases of movement are all internal to a phase; the banned long
        cases are all across the boundary of a phase. If all checking within a phase is
        simultaneous, then just this result obtains.

**II. Swiping**   (Sluiced Wh-word Inversion with Preposition In Northern Germanic)
        Merchant (2002)

(720)   Peter went to the movies, but I don't know who with

(721)   Ross analyzed these as deletion of a discontinuous portion of the structure.
(722)   All existing alternatives (Kim (1997), Richards (1997), Merchant (2002),
        Craenenbroeck (2004), etc.) eschew this and have the PP move.

(723)   Merchant is especially concerned to capture two major properties of Swiping.
(724)   First, only very light wh's, $X^0$'s, participate in the construction (the 'Minimality
        Condition'):

(725) Acceptable                    Unacceptable
        who                             which
        what                            which one
        when                            which composer
        where                           whose
                                        how rich
                                        how rich of a guy
                                        what kind
                                        what time
                                        what town
                                        etc.

(726)   Second, Swiping only shows up under Sluicing (the 'Sluicing Condition'):

(727)   *Peter went to the movies, but I don't know who with he went to the movies

(728)   Swiping involves head movement. The Minimality Condition falls out from Structure
        Preservation.

(729)   The Sluicing Condition is more problematic. Merchant does show that to state it at all,
        head movement should be a PF operation (as also argued by Boeckx and Stjepanovic
        (2001) for other reasons). But as far as I can tell, the Condition itself doesn't actually
        follow.
(730)   Proposed extension of Merchant's account, incorporating some aspects of that of
        Richards (1997):

(731)   Given that head movement is a PF process, it cannot precede wh-movement.
(732)   Movement leaves a copy (or copies). All but the highest copy usually must delete.

(733)   This deletion is under strict identity: If one copy is altered and another is not, deletion fails. (Takahashi (1994)). Linearization thus fails.

(734)   ... [with who] [he went to the movies [with who]]

(735)   ... [who+with] [$_{IP}$ he went to the movies [with who]]

(736)   Deletion of [with who] fails, hence linearization does.

(737)   But if Sluicing takes place, [with who] is eliminated along with the entire IP, so the linearization problem is 'repaired by ellipsis'.

(738)   One remaining problem, discovered by Craenenbroeck (2004):

(739)   Mary is talking.
        Who do you think to?

(740)   I'll have to leave that one for future research.

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