**Ellipsis and Long Movement 'Repair'**

Howard Lasnik

I. Ellipsis and island violation repair

(1)   I believe that he bit someone, but they don't know who
         (I believe that he bit)
(2)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
(3)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
(4)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
(5)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)

(6) 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]
(7) 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]

(8)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)

(9)   I don't know   CP
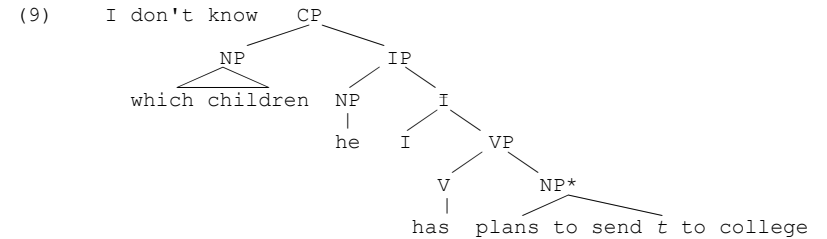
(10)   Chomsky rejects global derivational constraints, and
       suggests [see also Baker and Brame (1972), and, for an
       opposing view, Lakoff (1970), Lakoff (1972)] that * (# in
       Chomsky's presentation) is assigned to an island when it
       is crossed by a movement operation (the complex NP in
       (9)). An output condition forbidding * in surface
       structures accounts for the deviance of standard island
       violations.
(11)   If a later operation (Sluicing in this case) deletes a
       category containing the *-marked item, the derivation is
       salvaged.
(12)   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 (1995b),
       Lasnik (2001).

(13)   Much more recently 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.
(14)   However, Merchant (1999), following Ross (1969), provides
       very strong evidence that syntactic movement (and hence
       deletion) *is* involved in Sluicing constructions. The
       evidence involves:
(15)   'Case matching': In overtly Case inflected languages (such
       as German), the Case of the remnant 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.
(16)   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.107
(17)   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.109

(18) And preposition stranding: In languages that allow P-
      stranding (such as English), the remnant can be the bare
      object of a preposition; in languages that don't (such as
      Greek) it can't, and this is even true in the island
      violation configurations.
(19) Peter was talking with someone, but I don't know who
                                              Merchant, p.111
(20) Peter's mom will get angry if he talks with someone from
      his class, but I don't remember who

(21) I   Anna milise me   kapjon, alla dhe ksero *(me) pjon
      the Anna spoke with someone but not I.know with who
(22) 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.'

(23) In Chomsky's approach, "a new element is introduced..."
                                              Lakoff (1972, p.81)
(24) Thus, a possible technical argument, due to Kitahara
      (1999), against an approach like Chomsky's:
(25) "... 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

(26) Kitahara's alternative to *-marking (for a related
      phenomenon):
(27) An expression is marginally deviant if its derivation
      employs an MLC-violating application of Attract. p.80

(28) Merchant (1999) explicitly rejects Chomsky's (1972)
      approach, on empirical grounds, because of instances of:

II. Failure of Island Violation Repair

(29) *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 (1999)
(30) Compare (31), which also involves a relative clause
      island:
(31) 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 (1999)

(32) 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:
(33) We left before they started playing party games.
      *What did you leave before they did [$_{VP}$ ~~start playing t~~]?

(34) 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 (33), unlike the situation in (29).

(35) 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, do not, and their violation therefore cannot be
      repaired by ellipsis.

(36) (31) is then reanalyzed as:
(37) 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)]
(38) They hired someone who speaks a Balkan language –
      Guess which [~~she speaks t~~]

(39) No-one moved to a certain town – guess which!   Merchant
      p.267
(40) (39) has no island, so is unproblematic. But...
(41) Noone had a student who worked on a certain Balkan
      language, but I can't remember which Balkan language
      [Lasnik (2000)]

(42) 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:

(43) 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~~]

(44) 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
(45) !How many of the other linguists did the philosopher
      criticize

(46) Some of Merchant's PF islands: COMP-trace effects; derived
      positions (topicalizations, subjects)

(47) 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.219]

(48) 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.219, from Chung et al. (1995)

(49) 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.220]

(50)   Recall the apparent failure of island violation repair
       with Merchant's non-PF island:

(51)   *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~~]

(52)   But, surprisingly, we find the same apparent failure of
       repair with Merchant's PF islands [Lasnik (2000)]:

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

(54)   *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]

(55)   *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]

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

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

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

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

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

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

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

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

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

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

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

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

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

(69)   Is VPE blocked when Sluicing is available (Sort of 'Delete
       as much as you can')?

(70)   Someone solved the problem.

Who (?did)?

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

(72)   I know what I like and what I don't   Merchant p.69 [See
       Fiengo and May (1994) for similar examples.]

III. Towards a Solution [This section is based on joint work
       with Danny Fox]

(73)   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:

(74)   *[How interesting] did Brio write [a t novel]

(75)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)

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

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

(78)a An old idea: a WH expression combines an interrogative and
       an indefinite. (See, for example, Stockwell et al.
       (1973,   p.606))
    b The 'trace' is the indefinite.

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

(80)   The Parallelism required for ellipsis is satisfied since
       the variables in the antecedent and the elided clause are
       bound by parallel operators and from parallel positions.

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

(82)   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.

(83)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).

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

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

(88)   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,
       assuming that movement is not allowed to proceed in one
       long 'island-violating' step followed by short successive
       steps. (Metaphorically, when you enter the subway, you
       must choose the express or the local.)

(89)   This line of reasoning immediately extends to the badness
       of the classic island situations discussed by Merchant.

(90)   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.

(91)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.

(92)   Compare:
(93)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.

(94)   The somewhat less degraded status of very short movement
       cases such as (68) can now possibly be explained in terms
       of Pseudogapping (a variant of VPE where a remnant is
       first raised out of the inner VP in a shell structure,
       and that inner VP is deleted). The WH-trace can be
       completely outside of the ellipsis site. If I am right
       that the raising of the remnant is A-movement, it follows
       that long distance instances will not be possible.

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

(96)
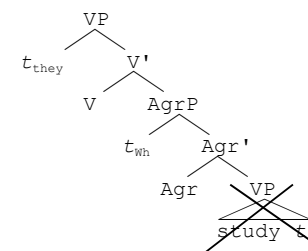
(97)   (?)Mary studied Bulgarian and John did Macedonian

(98)   Finally (and most speculatively) it is generally very
       difficult to get 'long distance' readings of wh-adjuncts
       in Sluicing constructions:
(99)   Mary left sometime, but Bill doesn't know [$_{CP}$ when [$_{IP}$ ~~Mary~~
       ~~left t~~]]
(100) ?*John claimed that Mary left sometime, but Bill doesn't
       know [$_{CP}$ when [$_{IP}$ ~~John claimed [that Mary left t]~~]]
(101) John left for some reason, but I don't know [$_{CP}$ why [$_{IP}$ ~~John~~
       ~~left t~~]]
(102) ?*Mary claimed that John left for some reason, but I don't
       know [$_{CP}$ why [$_{IP}$ ~~Mary claimed [that John left t]~~]]
(103) This will follow on the theory of Lasnik and Saito
       (1984;1992) that the locality constraints on adjuncts
       (unlike those on arguments) must be satisfied at LF.
       Thus, PF deletion will be of no avail.

IV. Lack of Repair by Pseudogapping

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

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

(106) 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)

(107) "...a [-Interpretable] feature is 'frozen in place' when
       it is checked, Case being the prototype."   Chomsky
       (1986b, p.280)

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

(109) "... 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)

(110) "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)

(111) Pseudogapping is A-movement of the survivor (to Spec of Agr$_o$) followed by VP ellipsis.

(112) 'Object shift' is optional in English. Hence [$_v$ V DP] must be a Case checking configuration.

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

(114) But what of 'short' Pseudogapping?

(115) "... all operations within the phase are in effect simultaneously."   {Chomsky, 2001, p.24}

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