### Some Reconstruction Riddles
Howard Lasnik
University of Connecticut
lasnik@sp.uconn.edu

**I.  Condition C Complement/Adjunct Reconstruction Asymmetries**
**(The 'Lebeaux Effect')**

(1) a.  Which report that $John_i$ revised did $he_i$ submit?
    b.  Which report that $John_i$ was incompetent did $he_i$ submit?
                                        Freidin (1986)
(2) a.  *$He_i$ believes the claim that $John_i$ is nice.
    b.  *$He_i$ likes the story that $John_i$ wrote.
    c.  *Whose claim that $John_i$ is nice did $he_i$ believe?
    d.  Which story that $John_i$ wrote did $he_i$ like?
                                        Lebeaux (1988)
(3) a.  *Which claim that $John_i$ was asleep did $he_i$ later deny
    b.  Which claim that $John_i$ made did $he_i$ later deny
                                        Munn (1994)
(4) a.  *Which claim [that $John_i$ was asleep] was $he_i$ willing to
        discuss
    b.  Which claim [that $John_i$ made] was $he_i$ willing to discuss
(5) a.  *The claim that $John_i$ is [sic] asleep, $he_i$ was willing to
        discuss
    b.  The claim that $John_i$ made, he was willing to discuss
                                        Chomsky (1993)
(6) a.  *The claim that $John_i$ was asleep, $he_i$ won't discuss
    b.  The claim that $John_i$ made, $he_i$ won't discuss
                                        Chomsky and Lasnik
(1993)

(7)     The claim that $John_i$ was asleep seems to $him_i$ [$_{IP}$ $t$ to be
        correct]                        Chomsky (1993)
(8)     *I seem to $him_i$ [$t$ to like $John_i$]

(9) a.  The 'Extension Condition': structure must be built
        strictly cyclically.
    b.  Adjuncts are exempt from the Extension Condition;
        relative clauses are adjuncts.
    c.  "Reconstruction" is essentially a reflex of the formation
        of operator-variable constructions.
    b.  An operator chain (a sequence of copies) undergoes
        complementary deletion.
    c.  Condition C is an LF requirement.    Chomsky (1993)

(10)a.  [Which claim [that John made]] was he willing to discuss
        ~~which claim~~    PF
    b.  [Which ~~claim~~ [that John made]] was he willing to discuss
        ~~which~~ claim    LF
    c.  For which x that John made, he was willing to discuss x
        claim              Interpretation (?)

(11)a.  [Which claim [that John made]] was he willing to discuss
        ~~which claim~~    PF
    b.  [Which claim [that John made]] was he willing to discuss
        ~~which claim~~    LF
    c.  For which x, x a claim that John made, he was willing to
        discuss x          Interpretation (?)

(12)a.  Which claim [that John was asleep] was he willing to
        discuss ~~which claim that John was asleep~~    PF
    b.  [Which ~~claim [that John was asleep]~~] was he willing to
        discuss [~~which~~ claim that John was asleep]    LF
    c.  For which x, he was willing to discuss x claim that John
        was asleep         Interpretation (?)
**BUT CRUCIALLY NOT**
(13)a.  Which claim [that John was asleep] was he willing to
        discuss ~~which claim that John was asleep~~    PF
    b.  [Which ~~claim~~ [that John was asleep]] was he willing to
        discuss [~~which~~ claim ~~that John was asleep~~]    LF
    c.  For which x that John was asleep, he was willing to
        discuss x claim    Interpretation (?)
**OR**
(14)a.  Which claim [that John was asleep] was he willing to
        discuss ~~which claim that John was asleep~~    PF
    b.  [Which claim [that John was asleep]] was he willing to
        discuss [~~which claim that John was asleep~~]    LF
    c.  For which x, x a claim that John was asleep, he was
        willing to discuss x    Interpretation (?)

(15)  "...preference principle for reconstruction: Do it when you
      can (i.e., try to minimize the restriction in the
      operator position)."

(16)  Which piece of evidence that John was guilty did he
      successfully refute?
(17)  The widespread belief that John is incompetent, he deeply
      resents
(18)  Whose argument that John was incorrect did you show him?
(19)  How many arguments that John's theory was correct did he
      publish?
(20)  This argument that John's theory is correct, he is now
      ready to publish.
(21)  Which proof that Mary's theory is superior to John's did
      she present?
(22)  Mary's attempt to hire John's student, he heartily
      endorsed.
(23)  John's request to attend Mary's lecture, she immediately
      granted.

(24)a.  The claim that the $director_i$ was corrupt, $he_i$ was
        unwilling to discuss
    b.  That the $director_i$ was corrupt, everyone knew that $he_i$
        would always be able to deny with a straight face
                                        Postal (1997)

(25)a. Whose allegation that John$_i$ was less than truthful did he$_i$ refute vehemently?
   b. Whose claim that the Senator$_i$ had violated the campaign finance regulations did he$_i$ dismiss as politically motivated?                          Kuno (1997)

(26)a. *Which claim that John$_i$ was asleep did he$_i$ later deny
   b. Which claim that John$_i$ made did he$_i$ later deny
                                              Munn (1994)
(27)   Later than what, one might ask?

(28)   *Whose claim that John$_i$ is nice did he$_i$ believe?
                                              Lebeaux (1988)
(29)   Susan: John is nice.
       Mary:  John is nice.
      ‼John:  I believe Susan but I don't believe Mary.

(30)   Which ['pro'] report that John$_i$ was incompetent did he$_i$ submit?                          Freidin (1986)

(31)   What if the complement/relative asymmetry with WH-movement is illusory.  How problematic is that for the theory?
(32)a. (9)a vs. b is arguably just a stipulation, as is (9)c.
   b. (15) is clearly a stipulation.
(33)   If anything, then, lack of that asymmetry would be a 'better' state of affairs.  (The only mildly negative consequence, depending on your point of view, is that a potential argument for traces, i.e., copies, disappears.)

(34)a. The Projection Principle requires that heads and their arguments, and the arguments of these heads, and so on, must be present in the base.
   b. Adjuncts need not be present in the base.
   c. Condition C is not earmarked for any particular level--it applies throughout the derivation, and marks as ungrammatical any configuration it sees, in which a name is c-commanded by a coindexed pronoun.
                       Lebeaux (1988); Lebeaux (1990)

(35)   The claim that John$_i$ was asleep seems to him$_i$ [$_{IP}$ $t$ to be correct]                          Chomsky (1993)
(36)   Lexical material is inserted only in the head position of an A-chain.     Lebeaux (1988); Lebeaux (1990)

## II. On Lack of Reconstruction With A-Movement
(37)   "[Reconstruction] is a consequence of operator-variable constructions driven by FI, a process that may (or sometimes must) leave part of the trace - a copy of the moved element - intact at LF..."     Chomsky (1995)
(38)   "That reconstruction should be barred in A-chains is thus plausible on conceptual grounds."

(39)   *John$_i$ expected [him$_i$ to seem to me [$_\alpha$ $\underline{t}$ to be intelligent]]
(40)   "...under reconstruction the violation [of Condition B] should be eliminated, with *him* interpreted in the position of $t$..."

(41)a. (it seems that) everyone isn't there yet
   b. Everyone seems [$t$ not to be there yet]
   c. I expected [everyone not to be there yet]
                                              Chomsky (1995)
(42)   "[the lack of wide scope for negation in (41)b] indicates that there is no reconstruction to the trace position..."
## III. Quantifier Lowering?
(43)   Some politician is likely to address John's constituency
                                              May (1977)
(44)   "[(43)] may be taken as asserting either (i) that there is a politician, e.g., Rockefeller, who is likely to address John's constituency, or (ii) that it is likely that there is some politician (or other) who will address John's constituency."

(45)   On the first reading, the speaker has a particular individual in mind (a politician, in this instance), but, for some discourse reason or other, does not identify that individual.  On the second reading (the 'lowered' one), the speaker does not have any particular individual in mind.  The ambiguity might than fall under theme-rheme properties, the 'wide scope' quantifier being a theme or topic.

(46)   Some politician addressed John's constituency
   a. ...namely Rockefeller
   b. ...I can tell by all the balloons and flags on the green

(47)   Someone is likely to clean the blackboard
(48)   Someone cleaned the blackboard
   a. ...namely, Joe the maintenance man
   b. ...I have no idea who, but the board was covered with phrase structure trees last night, and is now bare

(49)a. No large Mersenne number was proven to be prime  ≠
   b. It was proven that no large Mersenne number is prime
(50)a. Noone is certain to solve the problem  ≠
   b. It is certain that noone will solve the problem
(51)a. Every coin is 50% likely to land heads  ≠
   b. It is 50% likely that every coin will land heads
(52)a. Every coin is 3% likely to land heads  ≠
   b. It is 3% likely that every coin will land heads

(53)a. A hippogryph is likely to be apprehended
   b. It is likely that a hippogryph will be apprehended
(54)a. A hippogryph is anxious to be apprehended  ≠
   b. *It is anxious that a hippogryph will be apprehended

(55)   Some linguist is anxious to solve the problem of quirky Case
(56)   (55) can be appropriately uttered whether or not the speaker has a particular linguist in mind.  The second circumstance might involve, say, a report of an anonymous e-mail posting urgently requesting information about quirky Case.

(57)a. No agent$_i$ was believed by his$_i$ superior to be a spy for
       the other side  ≠
    b.*It was believed by his$_i$ superior that no agent$_i$ was a spy
       for the other side                    May (1985)

(58)   Some professor$_i$ is believed by his$_i$ students to be a
       tyrant
(59)a. Howard Lasnik is believed by his students to be a tyrant
    b. Some professor (or other), I have no idea exactly who, is
       believed by his students to be a tyrant
(60)   The context for (59)b might be the discovery of graffiti
       scrawled on the lavatory wall saying "Our professor is a
       tyrant".

(61) (✓)Each other's supporters frightened the candidates
(62) (*)Each other's supporters attacked the candidates

(63) (✓)Each other's supporters seem to the candidates to be
       unscrupulous
(64) (*)Each other's supporters asked the candidates to be more
       honest

(65)   If the contrasts in (61)-(64) are genuine, they might be
       handled 'on-line', as in Belletti and Rizzi (1988) or,
       for that matter, in Lebeaux's theory.

(66)   For 'anti-reconstruction' with Condition C, and possibly
       for lack of Quantifier Lowering, these interpretive
       processes could be limited to LF.  But this begs the
       question:
(67)   Why would traces of A-movement, unlike traces of Ā-
       movement, not be accessible to LF processes?

(68)   Recall that Chomsky simply stipulates that reconstruction
       is a property of operator-variable constructions.
(69)   A more interesting (though more radical?) possibility: A-
       movement, unlike Ā-movement, does not leave a trace,
       where a trace is, following Chomsky, a copy of the item
       that moves, and LF reconstruction effects result from
       failure to delete (a portion of) a lower copy.
(70)   Ā-movement typically creates an operator-variable
       relation, so at least an 'initial' trace is necessary.
       For A-movement, on the other hand, the trace is seemingly
       a theoretical excrescence.  There are not two separate
       interpretive roles for a moved NP and its trace to
       fulfill.

(71)   "In the phonological component, traces delete.  We have
       found no reason to extend that convention to the N→λ
       computation, and indeed cannot; were we to do so, θ-
       positions would be invisible at LF..."   Chomsky (1995)
(79)   Alternative: θ-roles are 'checked' in the course of a
       derivation.  The moved argument is itself a record of the
       crucial part of the history of its derivation. [On θ-
       roles as features, see, for example, Bošković and
       Takahashi (1995) and Lasnik (1995).]

-5-

Bibliography

Barss, Andrew. 1986. *Chains and anaphoric dependence: On
    reconstruction and its implications*. Doctoral
    dissertation, MIT, Cambridge, Mass.
Belletti, Adriana, and Luigi Rizzi. 1988. Psych-verbs and theta
    theory. *Natural Language and Linguistic Theory* 6: 291-
    352.
Bošković, Željko, and Daiko Takahashi. 1995. Scrambling and last
    resort. Ms. University of Connecticut, Storrs and City
    University of New York, New York.
Chomsky, Noam. 1993. A minimalist program for linguistic theory.
    In *The view from Building 20*, ed. Kenneth Hale and Samuel
    J. Keyser, 1-52. Cambridge, Mass.: MIT Press.
Chomsky, Noam. 1995. Categories and transformations. In *The
    minimalist program*, 219-394. Cambridge, Mass.: MIT Press.
Chomsky, Noam, and Howard Lasnik. 1993. The theory of principles
    and parameters. In *Syntax: An international handbook of
    contemporary research*, Vol. 1, ed. Joachim Jacobs, Arnim
    von Stechow, Wolfgang Sternefeld, and Theo Vennemann,
    506-569. Berlin: Walter de Gruyter.
Fox, Danny. 1997. Reconstruction, binding theory and the
    interpretation of chains. Ms. MIT.
Freidin, Robert. 1986. Fundamental issues in the theory of
    binding. In *Studies in the acquisition of anaphora*, Vol.
    1, ed. Barbara Lust, 151-188. Dordrecht: Reidel.
Heycock, Caroline. 1995. Asymmetries in reconstruction.
    *Linguistic Inquiry* 26: 547-570.
Kuno, Susumo. 1997. Binding theory in the minimalist program.
    Ms. Harvard University.
Lasnik, Howard. 1995. A note on pseudogapping. In *Papers on
    minimalist syntax, MIT working papers in linguistics* 27,
    143-163.
Lebeaux, David. 1988. *Language acquisition and the form of the
    grammar*. Doctoral dissertation, University of
    Massachusetts, Amherst.
Lebeaux, David. 1990. Relative clauses, licensing, and the
    nature of the derivation. In *Proceedings of NELS 20*, 318-
    332. GLSA.
May, Robert. 1977. *The grammar of quantification*. Doctoral
    dissertation, MIT, Cambridge, Mass.
May, Robert. 1985. *Logical Form: Its structure and derivation*.
    Cambridge, Mass.: MIT Press.
Munn, Alan. 1994. A minimalist account of reconstruction
    asymmetries. In *Proceedings of NELS 24*. GLSA.
Postal, Paul. 1997. Strong crossover violations and binding
    principles. ESCOL97.

-6-