I. Three theories of Last Resort

(1) "John is likely [to win]"

(2) "Last Resort": Items move only if they have to, a move towards simplicity in derivations. (In modern form, the idea goes back to Chomsky (1981). Interestingly, the antecedents of the idea, like those of many Minimalist ideas, are quite old: "...an obvious decision is to consider minimization of the optional part of the grammar to be the major factor in reducing complexity." Chomsky (1958)]

(3) 'Greed': Movement of \( \alpha \) to \( \beta \) must be for the satisfaction of formal requirements of \( \alpha \). Chomsky (1993), Chomsky (1994)

(4) One such formal requirement is that 'uninterpretable' features be deleted under proximity to appropriate matching features.

(5) John in (1) had no need to move. All its requirement are satisfied in the lower clause.

(6) BUT, if finite Infl has a nominative Case feature that it must discharge, and if John has already checked (and deleted) its Case in the lower clause, then matrix Infl in (1) will never get rid of its uninterpretable Case feature. Greed is redundant here.

(7) John is believed [to be likely [to be arrested]]

(8) There is very strong evidence, especially from binding theory, that A-movement successive cyclically moves an NP through every intervening Spec of IP. There is also very good reason to believe that the EPP is valid.

(9) What features of John itself could possibly demand to be checked in every subject position it passes through? It is phenomena of this type that require a computationally complex global property of Greed. The derivation has to see that a step of movement will ULTIMATELY lead to some benefit for the moving item.

(10) 'Enlightened Self Interest': Movement of \( \alpha \) to \( \beta \) must be for the satisfaction of formal requirements of \( \alpha \) or \( \beta \). Lasnik (1995a), Lasnik (1995b) [both reprinted in Lasnik (1999)]

II. Three Theories of Feature Strength

(17) Procrastinate: LF movement is preferred to overt movement.

(14) When movement is overt, it must have been forced to operate 'early' by some special requirement. Chomsky (1993;1994;1995) codes this requirement into 'strong features'.

(15) A A strong feature that is not checked in overt syntax causes a derivation to crash at PF. Chomsky (1993)

B A strong feature that is not checked (and eliminated) in overt syntax causes a derivation to crash at LF. Chomsky (1994)

C A strong feature must be eliminated (almost) immediately upon its introduction into the phrase marker. Chomsky (1995)

(16) Ellipsis provides potential evidence for (A), if it is, as suggested by Chomsky and Lasnik (1993), a PF deletion process. Though, as we will see, this raises the specter of computational complexity again.

(17) Two instances: first Pseudogapping then Sluicing.

(18) a If you don’t believe me, you will i the weatherman

b I rolled up a newspaper, and Lynn did o a magazine

c Kathy likes astronomy, but she doesn’t o meteorology

Levin (1978)

(19) 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

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


(22) Pseudogapping as overt raising to Spec of Agr followed by deletion of VP. [Lasnik (1995d)]
(23) AgrS
    / \    
   NP    AgrS'
  you / \   
  AgrS  TP
   T  VP
  will / \   
  NP  V'
   t / \    
  V  AgrS
  [F] / \   
  NP  AgrS'
  Bob / \  
  AgrS  VP
   |    
  V  NP
  believe  t

(24) *You will Bob believe

(25) AgrS
    / \    
   NP    AgrS'
  you / \    
  AgrS  TP
   T  VP
  will / \    
  NP  V'
   t / \    
  V  AgrS
  [F] / \    
  NP  AgrS'
  Bob / \    
  AgrS  VP
   |    
  V  NP
  believe  t

(26) Suppose the strong feature driving V-raising resides in the lexical V rather than in the higher 'shell' V. The strong feature of the verb must either be checked by overt raising to the shell V or be contained in an ellipsis site. PF deletion could eliminate the unchecked strong feature. Notice, though, that this seems incompatible with Suicidal Greed.

(27) Sluicing - WH-Movement followed by deletion of IP

(28) Speaker A: Mary will see someone.
    Speaker B: I wonder who Mary will see.

(29) Speaker A: Mary will see someone.
    Speaker B: Who Mary will see?

(30) CP
    / \    
   NP  C'
  who / \    
  C  IP
   I  VP
  will / \    
  NP  I'
  Mary / \    
  I  VP
  will / \    
  V'  NP
  believe  t

(31) *Who Mary will see?

(32) Who will Mary see?

(33) Suppose that in a matrix interrogative, it is Infl that has a strong feature, rather than C. The strong feature of Infl must either be checked by overt raising to the interrogative C or be contained in an ellipsis site. PF deletion could eliminate the unchecked strong feature. Again, this works nicely but seems incompatible with Suicidal Greed.

(34) There is a possible alternative analysis, based on the Chomsky (1995) theory of pied-piping, particularly as explicated by Ochi (1997), Ochi (1999).

(35) "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 FP." Chomsky (1995, p.262)

(36) "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..." (Chomsky 1995, p.264)

(37) Matrix interrogative C might then contain the strong feature, with the matching feature of Infl raising (abstracting away from 'split Infl' details). [Ross (1969), Saito and Murasugi (1990), Lobeck (1990)]
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.

\[(38)\]
\[
\begin{array}{c}
CP \\
/  \\
NP  C' \\
who /  \\
C  IP \\
[strong: F] /  \\
NP  I' \\
Mary /  \\
I  VP \\
will |  \\
[F]  V' \\
/  \\
V  NP \\
see \end{array}
\]

Similarly for the feature driving overt V-raising: it
could be a strong feature of the higher V. Once the
matching feature of the lower lexical V is 'attracted',
the lower V becomes defective. 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.

(39) Similarly for the feature driving overt V-raising: it
could be a strong feature of the higher V. Once the
matching feature of the lower lexical V is 'attracted',
the lower V becomes defective. 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.

III. Three Theories of Covert Movement

(40)a There is/*are a man here
b There are/*is men here

(41) There is a man here  S-structure
(42) A man is t here  LF  Chomsky (1986)

(44)a Some linguists seem to each other [t to have been given
good job offers]
b *There seem to each other [t to have been some linguists
given good job offers]

(45)a No good linguistic theories seem to any philosophers [t
to have been formulated]
b *There seem to any philosophers [t to have been no good
linguistic theories formulated]

(46)a Some defendant, seems to his lawyer [t to have been at
the scene]
b *There seems to his, lawyer [t to have been some defendant,
at the scene]

(47) "The operation Move...seeks to raise just F."  Chomsky
(1995)

When movement is covert, hence only of formal features,
the referential and quantificational properties needed to
create new binding and scope configurations are left
behind, so no such new configurations are created.
Lasnik (1995c), Lasnik (In press)(somewhat extending a
proposal of Chomsky (1995))

(49) All else equal, movement should never be of an entire
syntactic category, but only of its formal features.
(50) As already discussed, PF requirements will normally force
movement of a category containing the formal features,
via a sort of pied-piping, under the assumption that a
bare feature (or set of features) is an ill-formed PF
object.

(51) For LF movement, on the other hand, pied-piping will
normally not be necessary, hence, by economy, will not
even be possible. Only the formal features will move, and
they will move exactly to the heads that have
matching features. [Procrastinate now becomes a true
economy principle; moving less material is more
economical than moving more.] In a standard existential
sentence like (52), then, the associate someone does not
actually move to there.

(52) There is someone here

(53) The movement of features in this case is driven by the
unchecked 0-features of Agr, there lacking agreement
features of its own.

(54) Chomsky (2000) presents a different, even more minimal,
theory of covert operations, one that provides an
alternative treatment for the binding and licensing
paradigms above.

(55) "In MP, Agree is analyzed in terms of feature-movement
(Attract)....Here we...dispense with Attract...Checking
reduces to deletion under matching..."  Chomsky (2000)

(56) "There is a single cycle; all operations are cyclic.
Within narrow syntax, operations that have or lack
phonetic effects are interspersed. There is no distinct
LF component within narrow syntax...Agree alone, not
combined with Merge in the operation Move, can precede
over operations, contrary to the assumptions of MP and
related work."  Chomsky (2000)

The complementarity between normally obligatory movement
and ellipsis receives a rather straightforward account in
terms of feature movement, as seen in the discussion of
Sluicing and Pseudogapping. It is not clear how this
would be expressed if feature movement were eliminated
from the theory in favor of long distance agreement. The
most minimal theory of covert movement might not be the
correct one.
References


Lasnik, Howard. In press. Feature movement or agreement at a distance? In Remnant movement, F-Movement and the T-