Re-reconsidering ECM

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(1)   I believe <u>her</u> to have convinced Bill

(2)   As is well known, in 'deep' respects, the underlined NP in (1) behaves like the subject of the lower predicate, while in 'surface' respects, most obviously morphological case, it behaves like the object of the matrix verb.

(3)   The morphological case of the subject of the infinitive in English is an objective case most typically associated with a direct object. And, for English, there is good evidence that the matrix verb, for example <u>believe</u> in (1), is responsible for that objective case. Overwhelmingly, the English Accusative-Infinitive construction occurs only as the complement of an otherwise transitive verb which is independently capable of licensing case on its complement. When an English transitive verb is made passive, it loses that capability:

(4)   I believe him
(5)   *It is believed him
       cf. He is believed

(6)   It is believed that she convinced Bill

(7)   The English Accusative-Infinitive construction patterns with (5) rather than with (6):
(8)   *It is believed her to have convinced Bill

(9)   In Latin, on the other hand, infinitive evidently licenses accusative case on its subject (the traditional view, analogous to finiteness licensing nominative). Even the subject of the complement of an adjective or a passive verb can be accusative:
(10)   Certum est Petrum   uenisse
        certain   is Peter-Acc. come Past infinitive
          'It is certain that Peter came'
                   [Rouveret and Vergnaud (1980)]
(11)   Dicitur   Petrum   uenisse
        it-is-said Peter-Acc come Past infinitive
         'It is said that Peter came'

(12)   For English, it was standardly assumed in early generative grammar that the downstairs thematic subject becomes an upstairs object via transformation(s).
(13)   Chomsky (1955) had a process combining the higher and lower predicates and turning the underlying downstairs subject into the object of this complex predicate.
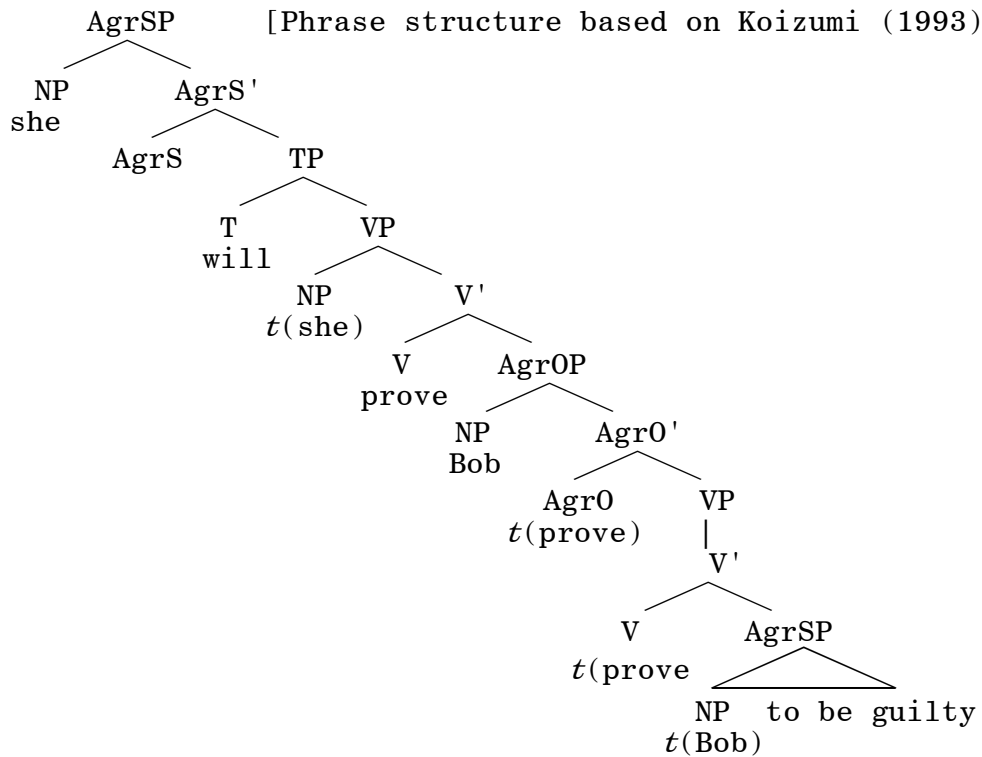
(14) Rosenbaum (1967), on the other hand, had the downstairs subject raising into higher object position, a view defended at great length by Postal (1974).

(15) "Three traditional arguments for higher object status" of the accusative subject in English [Postal 1974]:

(16) a. Jack believed Joan to be famous
     b. Joan was believed to be famous by Jack

(17) a. *Jack$_i$ believed him$_i$ to be immoral
     b. Jack$_i$ believed himself$_i$ to be immoral

(18)   They believed each other to be honest

(19) A new alternative, Chomsky (1973): The relations in (16)-(18) don't demand clause-mates. Rather, they just require that the two related elements not be separated by a finite clause boundary (the Tensed Sentence Condition). I sometimes call these 'boundary strength arguments'.

(20) But there are other phenomena [Postal (1974), Lasnik and Saito (1991)] that indicate that the accusative subject is at least as high in the structure as elements of the matrix clause ('height arguments').

(21) ?The DA proved [the defendants to be guilty] during each other's trials

(22) ?The DA accused the defendants during each other's trials

(23) ?*The DA proved [that the defendants were guilty] during each other's trials

(24) ?The DA proved [none of the defendants to be guilty] during any of the trials

(25)   The DA accused none of the defendants during any of the trials

(26) ?*The DA proved [that none of the defendants were guilty] during any of the trials

(27) Chomsky (1991) proposed raising, but not to object position, rather to Spec of an agreement projection above the VP, Agr$_O$, in the LF component (because of concerns about the word order).

(28) But Lasnik and Saito argued that at least some of the phenomena they explored implicate overt raising.

Further

(29) Sometimes the raising is audible, as in these examples from Postal (1974):

(30) I figured out [it was more than 300 miles from here to Tulsa]

(31) I figured it out [t to be more than 300 miles from here to Tulsa]

(32) Or these from Kayne. ((Though not Kayne's analysis. Johnson (1991) and Koizumi (1993) did offer a raising account.))

(33) (?)They're trying to make out John to be a liar   Kayne (1985, p.113), Johnson (1991)

(34)   They're trying to make John out to be a liar

(35) cf. They're trying to make out that John is a liar

(36) Koizumi proposed a way that the raising could be overt while still producing the correct word order, his 'split VP hypothesis', with the NP raising and the main V raising still higher.

(37)   She will prove Bob to be guilty

(38)   AgrSP   [Phrase structure based on Koizumi (1993)]

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                  AgrSP          [Phrase structure based on Koizumi (1993)]
                 /     \
               NP      AgrS'
               she    /     \
                   AgrS      TP
                           /    \
                          T      VP
                        will    /   \
                              NP     V'
                            t(she)  /   \
                                   V    AgrOP
                                 prove  /    \
                                      NP     AgrO'
                                      Bob   /     \
                                         AgrO      VP
                                       t(prove)    |
                                                   V'
                                                  /   \
                                                 V     AgrSP
                                             t(prove   /\
                                                     NP  to be guilty
                                                   t(Bob)
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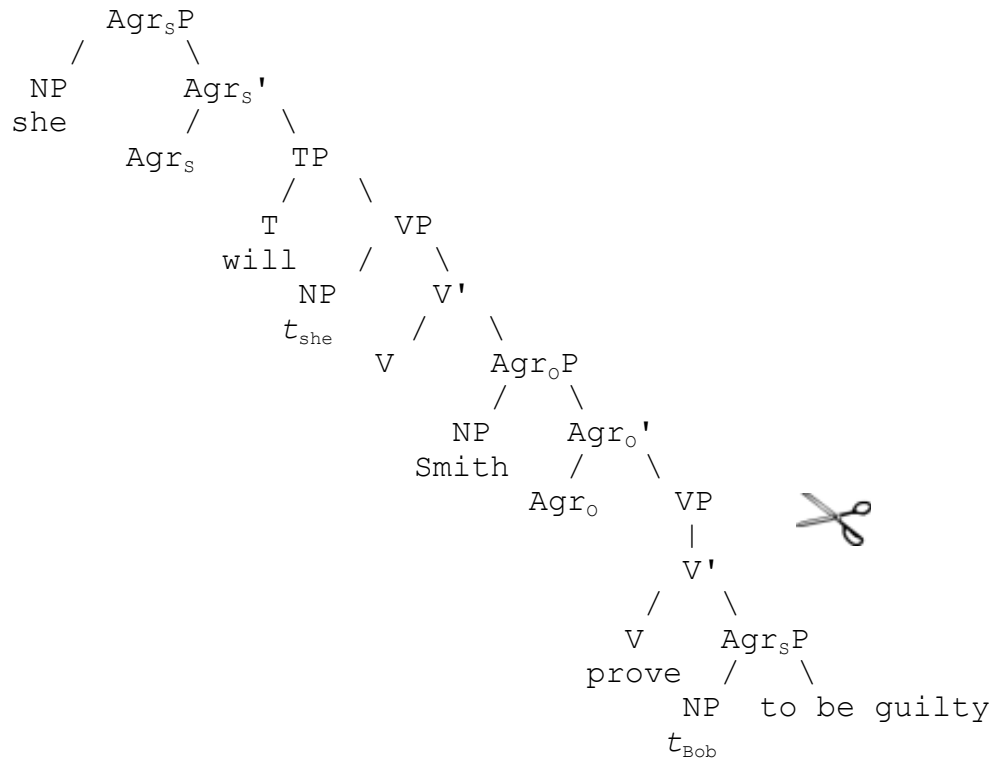
(39)   An additional argument for overt raising of an ECM subject (or, for that matter, a matrix object); Pseudogapping as VP ellipsis Jayaseelan (1990) (Jayaseelan (1990)), with the remnant having raised to Spec of Agr$_O$ (Lasnik (1995)).

(40)   Mary hired John, and Susan will ~~hire~~ Bill
(41)   He proved Jones (to be) guilty and she will ~~prove~~ Smith ~~(to be) guilty~~

(42)
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                    Agr_sP
                  /       \
              NP          Agr_s'
             she         /     \
                     Agr_s       TP
                             /      \
                          T          VP
                        will      /     \
                              NP          V'
                            t_she       /    \
                                     V        Agr_oP
                                            /        \
                                        NP           Agr_o'
                                      Smith         /      \
                                               Agr_o        VP
                                                            |
                                                            V'
                                                          /    \
                                                        V        Agr_sP
                                                      prove     /      \
                                                             NP    to be guilty
                                                            t_Bob
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(43)   One nice feature of a raising analysis (either that of Chomsky (1991) or Koizumi (1993))
        is that structural Case is always licensed in the same configuration: Spec of a functional
        head, a point made by Chomsky.

(44)   BUT there is evidence that the raising into the higher clause does not invariably take
        place, at least for some speakers.

(45)   (?)They're trying to make out John to be a liar   Kayne (1985, p.113), Johnson (1991)
(46)   They're trying to make John out to be a liar

(47)   A curious surface constraint discovered by Postal (1974) was used there to argue for
        raising, and for its obligatoriness.

(48)   *Not*-initial NPs occur only in (derived) subject position.   Postal (1974, p.95)
(49)   Not many gorillas have learned to tap-dance
(50)   ?*Joe kissed not many models
(51)   Not many Albanians have been interviewed by Sevareid   All from Postal (1974)

(52)   (*)Harry proved not many of those formulas to be theorems
cf.
(53)   Harry proved that not many of those formulas were theorems

(54)   Postal uses (52) to argue for obligatory raising. However, for some speakers, the example
        isn't so bad, suggesting that the raising need not have taken place.

(55)   The contrast emerges even more clearly in the *make out* infinitival construction:

(56)   ?They made out not many articles to have been published
                 (Needless to say, this one isn't good for those who don't get make out NP to ...
                 word order in the first place.)
(57)   *They made not many articles out to have been published

(58)   An observation about scope that Zubizarreta (1982) attributes to Chomsky, and that is
                 discussed again by Chomsky (1995), provides further evidence for the optionality of
                 object shift with ECM subjects for some speakers:
(59)   a. (it seems that) everyone isn't there yet
         b. everyone seems [t not to be there yet]
(60)   Chomsky (p.327) argues as follows: "Negation can have wide scope over the Q in
                 [(59)a]... but not in [(59)b]", concluding that "...reconstruction in the A-chain does not
                 take place, so it appears."
(61)   Thus, a universal quantifier in subject position can be understood in the scope of clausal
                 negation; but not if that quantifier has undergone raising.

(62)   I believe everyone not to be there yet   [Based on Chomsky (1995)]
(63)   For some speakers, Chomsky among them, this can have 'everyone' with scope below
                 'not', just as in the situation of "I believe that everyone isn't there yet".
(64)   What happens when the word order indicates whether or not raising has taken place?
(65)   The mathematician made every even number out not to be the sum of two primes
                 [Only has the crazy reading that the mathematician was pretending that no even
                 number is the sum of two primes.]
(66)   The mathematician made out every even number not to be the sum of two primes
                 [For speakers who get this word order in the firat place, in addition to the crazy
                 reading also has the sane reading that the mathematician was pretending that
                 Goldbach's conjecture is false.]
cf.
(67)   The mathematician made out that every even number isn't the sum of two primes
                 Lasnik (1999), Lasnik (2001)

(68)   Thus, we have more evidence that at least for some speakers, the raising in ECM
                 constructions is optional.

(69)   So how is Case licensed when the ECM subject doesn't raise? Possibly, as in LGB, by
                 government across the infinitival clause boundary. Or, a more modern version of the
                 idea, via long distance Agree.
(70)   But there is a potentially nicer possibility.
(71)   Davis (1984) rejected the classic LGB analysis, which was based on the idea that S,
                 unlike S', is not a maximal projection, so does not block government of the embedded
                 subject by the matrix verb, allowing the latter to Case-mark the former. Thus, following
                 "S'-deletion", a process triggered by a particular class of verbs, 'believe' governs and
                 Case-marks 'John' in
(72)   We believe [John to be intelligent]

(73)   But, Davis noted, once clauses are fully incorporated into X' theory, this becomes untenable: S is actually the maximal projection of Infl, so the needed government would not be available. As an alternative, Davis proposed that the Case feature of 'believe' percolates down to the head of its complement, non-finite Infl, thus providing the latter with accusative Case-marking ability.

(74)   Three notes on this:
a. Modern Minimalist feature inheritance is remarkably reminiscent of Davis's approach
b. Davis didn't comment on this, but a special configuration of Case-marking is eliminated - head to specifier of complement. In the new account, subjects are always assigned Case in the Spec-head configuration of a functional head, and this remain so even if the ECM subject doesn't raise.
c. In the 'Accusative-Infinitive' construction of Latin and Classical Greek, non-finite Infl was evidently directly responsible for the accusative Case on its specifier. Under Davis's proposal, these languages are actually quite similar to English, the only difference being that in English, non-finite Infl needs to inherit the Case-assigning feature while in Latin and Classical Greek infinitival Infl has that feature intrinsically.

(75)   An alternative version of Davis's proposal, suggested to me by Bob Freidin:
(76)   Already in the lexicon there are (at least) 2 kinds of infinitival Infl, one of them (presumably the marked one) licensing accusative Case on its Spec, the other one not.
(77)   Most English speakers have only the latter, so for them, raising will be necessary.
(78)   The other speakers have, in addition an infinitival Infl (almost like the one in Latin) that does license accusative. An 'ECM' verb has the option of selecting this second type of Infl. (The difference from Latin is that the acc-licensing Infl seems to be freely available in the latter language.)

(79)   Either version of the Davis idea is of benefit with respect to another observation of Kayne's (stated in my terms): With small clause complements, raising is obligatory for all speakers.
(80)   They're trying to make John out a liar   Kayne (1985, p.108-109)
(81)   *?They're trying to make out John a liar

(82)   This correlates pretty well with the 'not'-initial NP constraint:
(83)   Mary believes that not every politician is a liar
(84)   Mary believes not every politician to be a liar   [OK for some speakers]
(85)   *Mary believes not every politician a liar   [* for all]

(86)   Why should this be? If, as I have been assuming/arguing the issue is Case, it would be strange if the subject of a small clause could not be governed by the matrix verb while the subject of an infinitive could be. If one would anticipate am difference at all, it would be that a small clause boundary is weaker than any full clause boundary.
(87)   On a Davis type approach, one would just have to say that whatever the head of a small clause is, it's not the kind of thing that can have (or get) a Case feature.

(88)   Remaining research question: To what extent do the phenomena presented here and additional ones in {Lasnik, 2001 #757} implicating optional raising all correlate. It would be really nice if they correlated perfectly. But that's surely too much to expect.

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