The role of grammatical functions in transformational syntax
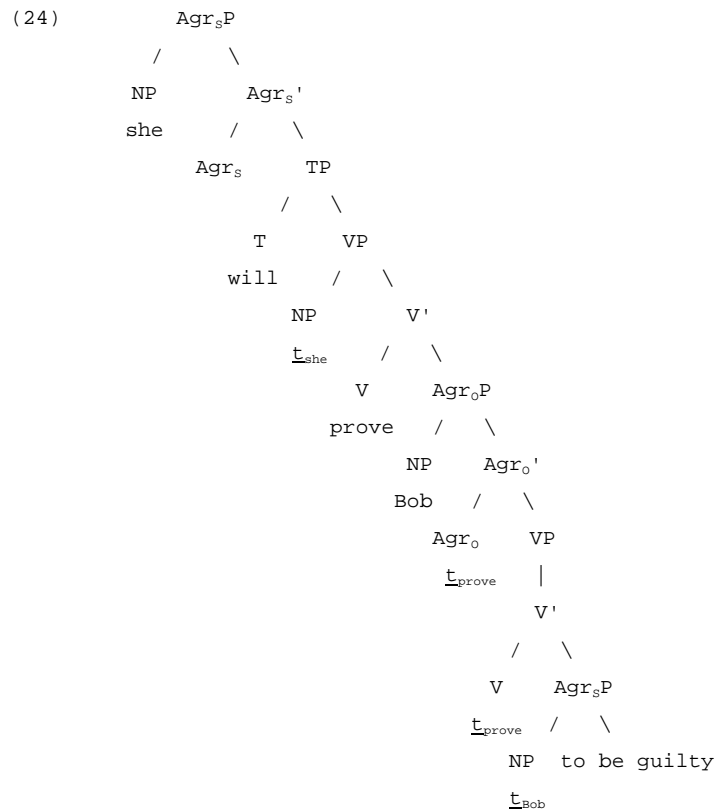1999 LSA Linguistic Institute Workshop

Subjects, Objects, and the EPP

Howard Lasnik
University of Connecticut
lasnik@sp.uconn.edu

(1)   The DA proved [two men to have been at the scene of the
       crime] during each other's trials
(2)   The DA proved [no suspect$_i$ to have been at the scene of the
       crime] during his$_i$ trial
(3)   The DA proved [noone to have been at the scene] during any
       of the trials

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

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

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

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

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

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

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of the crime] during his$_i$ trial
(21) *The DA proved [there to have been noone at the scene]
       during any of the trials

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

(23)   She will prove Bob to be guilty

(24)

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            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
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(25) If the adverbials in (1)-(3) are attached in the vicinity
       of the lower matrix VP, the binding and licensing receive
       a natural account.

(26) It is now natural to assume that the 'EPP' feature 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.

(27) An additional argument for overt raising of an object or an

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ECM subject; Pseudogapping as VP ellipsis (Jayaseelan
(1990)), with the remnant having raised to Spec of Agr_o

(28) Mary hired John, and Susan will ~~hire~~ Bill

(29) The DA proved Jones (to be) guilty and the Assistant DA
will ~~prove~~ Smith ~~(to be) guilty~~

(30) Unaccusatives show similar behavior, both for binding and
for Pseudogapping:

(31) There arrived two knights on each other's horses
Uriagereka (1988)

(32) ?There arrived an instructor but there didn't ~~arrive~~ a
professor

(33) So object shift is <u>possible</u>. Is it obligatory?

(34) *Joan believes him_i to be a genius even more fervently than
Bob_i does

(35) Joan believes he_i is a genius even more fervently than Bob_i
does   Postal (1974)

(36) But there are arguments that object shift does not always
take place.

(37) ?*Who was [a picture of <u>t</u>] selected

(38)   Who did you select [a picture of <u>t</u>]

(39) If object and subject both raise overtly, to [Spec, Agr_o]
and [Spec, Agr_s] respectively, the CED cannot distinguish
(37) from (38).   Branigan (1992)

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

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

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

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

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

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

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

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

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

(49) These paradigms argue, contra Lasnik (1995), 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.

(50)   Mary called up friends of John

(51) ?Mary called friends of John up   Johnson (1991)

(52)   Who did Mary call up friends of

(53) ?*Who did Mary call friends of up

(54)   Mary made John out to be a fool

(55)   Mary made out that John is a fool

(56)   Mary made out John to be a fool

(57) 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:

(58)a (it seems that) everyone isn't there yet
   b   everyone seems [<u>t</u> not to be there yet]

(59) Chomsky (p.327) argues as follows: "Negation can have wide
scope over the Q in [(58)a]... but not in [(58)b]",
concluding that "...reconstruction in the A-chain does
not take place, so it appears."

(60) 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 (61).

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

(62)   The alternative word order for (61), with <u>every even
number</u> unraised, does allow narrow scope for the
universal:

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

(64)   I expected [everyone not to be there yet]   Chomsky (1995)

(65)   I believe everyone not to have arrived yet

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

(67)   Everyone is believed not to have arrived yet

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

(69)   Someone is likely to solve the problem

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

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

(72) (71) cannot accurately be paraphrased by (73).

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

(74)   Noone is certain to solve the problem

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

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

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

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

(79)   The DA proved no defense witnesses to be credible
(80)   No defense witnesses were proved to be credible by the DA

(81) 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:
(82)   The DA proved no defense witnesses to be credible during any of the trials
(83)   *Joan believes him_i to be a genius even more fervently than Bob_i does
(84) It is not uncommon for 'object shift' to be obligatory with pronouns in a language even when it is optional with lexical NPs.

(85)   Mary made John out to be a fool
(86)   Mary made out John to be a fool

(87)   Mary made him out to be a fool
(88)   *Mary made out him to be a fool

(89)   The detective brought him in
(90)   *The detective brought in him   Chomsky (1955)

(91) Tanaka (1999) claims that when a simple sentence contains both an interrogative direct object and an interrogative temporal expression, it is necessarily the former that undergoes wh-movement:
(92)   ?Whom did the DA accuse during which trial
(93) ?*During which trial did the DA accuse whom
(94) Tanaka observes that Superiority, as subsumed under the Minimal Link Condition, accounts for this, but only if the direct object is necessarily higher than the temporal adverb.

(95)   What did John buy when
(96)   When did John buy what   Bošković (1997)

(97)   ?Whom did the DA prove to be innocent during which trial
(98) ?*During which trial did the DA prove whom to be innocent
                                    Tanaka (1999)

(99)   Whom did John prove to be guilty when
(100) ?*When did John prove whom to be guilty   Bošković (1997)

(101)   Whom did the DA make out to be guilty when
(102) ?*When did the DA make whom out to be guilty
(103) ??When did the DA make out whom to be guilty

(104) ?*When did you call whom up
(105)   When did you call up whom

(106) 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.
(107) Some of the discussion in Chomsky (1995, 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."
(108) Along these lines, suppose, then, that the optionality of raising is the optionality of Agr_o.
(109) This leaves us with the question of why Agr_s is obligatory. This is exactly the question of why the standard EPP holds.

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