Wh-in-situ and Bounding in LF

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I. Introduction

1a. Lack of Subjacency and CED effects in LF:

(1) a. *What do you remember where we bought it?
   b. LF Who remembers where we bought what?

(2) a. *Who do you like books that criticize it?
   b. LF Who likes books that criticize who?

(3) a. *Who do you think that pictures of t are on sale?
   b. LF Who thinks that pictures of who are on sale?

(4) a. *Who did you get jealous because I spoke to t?
   b. LF Who got jealous because I spoke to who?

(5) a. *What color hair did you meet [students with t]?
   b. LF Who met [students with what color hair]?

(6) a. *Who did you see John and t?
   b. LF Who saw John and who?

1b. ECP effects in LF:

(7) a. Why did you buy what?
   b. *What did you buy why?

(8) a. Who bought what?
   b. LF *What did who buy?

(9) a. *Who left why?
   b. *Why did who leave?

10. a. *What did you wonder why I bought it?
    b. *Why did you wonder what I bought it?
    c. *Who did you wonder why t bought the book?

11. ni zui xihuan [piping shei de shu]?
    you most like [piping who REL book]
    *Who do you like books that criticize it?

12. ni zui xihuan [a weishenme mai de shu]?
    you most like [a why REL book]
    *What is the reason x such that you like books that he bought for x?

13. ni xiang-zhidao [shei weishenme bu lai]?
    you wonder [she who why not come]
    *Who is the x such that you are wondering who, for x, did not come?

II. Pied-piping in LF and some problems


(18) ni xihuan [shei xie de shu]?
    you like [who write REL book]
    *You like the book that who wrote?

(19) a. wo xihuan [Zhangsan xie de shu].
    I like [Zhangsan write REL book]
    'I like the book that Zhangsan wrote.'
    b. Zhangsan xie de (shu).
    The book (or the one) that Zhangsan wrote.'
    c. ??Zhangsan.

(20) a. *Where did [people from t] buy what?
    b. What did [people from where] buy t?

(21) a. *I want to know who pictures of t please who.
    b. I want to know who pictures of who please t.

(22) a. *What did who buy?
    b. *Who did what please?

(23) *Who did you get angry because I spoke to t?

(24) Who got angry because I spoke to who?

(25) *Who got angry why?

(26) a. *Questo è successo mentre chi parlava alla stampa?
    'This happened while who was speaking to the press.'

(27) a. Gianni è stato arrestato mentre andava a Milano con chi?
    'Gianni was arrested while he was going to Milan with who'

(28) a. *Di chi parlava [l'avvocato t]?
    'Of whom spoke the lawyer'
(35) a. I wonder who Bill spoke to.
b. ?? I wonder to whom Bill spoke.
c. I wonder whose mother Bill spoke to.
d. I wonder whose friend's mother Bill spoke to.
e. *I wonder pictures of whom Bill saw.
f. *I wonder Mary and whom Bill saw.
g. I wonder the books that we wrote Bill bought.
h. I wonder which man Bill saw.

III. Toward an explanation of the SS/LF asymmetry

IIIa. The non-bARRIERhood of A'-phrases:

(36) este es el autor [de que], no sabemos [CP que libros t j leer].
This is the author [by whom], we know [CP what books t j to read].

(37) *esta es la autora [de la que], [IP varias traducciones t j han ganado premios internacionales].
This is the author by whom several translations have won international awards.

(38) [de que autora], no sabes [CP que traducciones t j han ganado premios internacionales].
By what author don’t you know what translations have won international awards?

(39) *Who do you think that [IP pictures of t j] are on sale?
(40) ?Who do you wonder [CP which pictures of t j [IP are on sale]]?

(41) A'-phrases are not barriers.

(42) Adjunction is possible only to a maximal projection that is a nonargument.

(43) a dominates b iff every segment of a dominates b. (May 1985, Chomsky 1986)

(44) Who1 do you wonder [CP [NP t j [NP which pictures of t j]] [IP are on sale]]?

IIIb. The scope of QR:

(45) [IP [NP pictures of everybody] [IP t j are on sale]].
(46) [IP [NP Everybody] [IP [NP pictures of t j] [IP t j are on sale]]?]

IIIc. Deriving the asymmetry:

(51) a. Who did pictures of who please?
b. [CP Who2 who3 did [IP pictures of t j] [IP t j please t2]]?

IV. Consequences

IVa. LF ECP effects: a new problem:

(60) a. *Who did please t2?
(61) *Who remembers what we bought why?
(62) [CP which t2 wh] did [IP t3 [IP t3 please t2]]?
(63) *ni xihuan [Li si weishenme mai de shu]? you like Li si why buy REL book
*You like [books that Li si bought why]?

IVb. LF ECP effects: a new problem:

IVc. LF ECP effects: a new problem:

(V) a. *Who did please t2?
(VI) *Who remembers what we bought why?
(VII) [CP which t2 wh] did [IP t3 [IP t3 please t2]]?
(VIII) *ni xihuan [Li si weishenme mai de shu]? you like Li si why buy REL book
*You like [books that Li si bought why]?
(64)  ni xiang-zhidao [shèi wèi wèn nín bu lái]?
      you wonder who why not come
  "Who2 do you wonder [why3 [t3 will not come t3]]?"
Unavailable reading: 'Why3 do you wonder [who will not come t3]?'
(65)  *Why2 did you wonder [what I bought t2]?
(66)  *How2 did you read [the book that John wrote t2]?
(67)  [CP why2 did you [vp t2 [vp wonder [CP what t2 I bought t2]]]]

IV.b. The (non)-barrierhood of A'-phrases:

(68)  A'-phrases are not barriers for movement (though they are still barriers of
government).
(69)  \ldots A \ldots [\gamma \ldots B \ldots [\gamma \ldots C \ldots ]]
(70)  \alpha \text{ governs } \beta \text{ iff } \alpha \text{ m-commands } \beta \text{ and for every } \gamma , \gamma \text{ a barrier, if } \gamma \text{ does not
exclude } \beta \text{ then } \gamma \text{ does not exclude } \alpha . \text{ (In (69), B governs C, but A does not
govern B.)}
(71)  Chinese: You wonder [who why won't come]?
[CP why2 [IP [CP t2 [CP who t2 will not come]]] [IP you wonder t3]]
(72)  *[On which table2 do you wonder [which books t2] I will buy]]?

IV.c. Other consequences

(73)  How2 do you think [t2] [John fixed the car t2]?
(74)  Fix the car, I wonder whether he will t.
(75)  Fix the car, I wonder whether he *(did) t.
(74)  *[CP What2 [C eat13 [IP you will [vp t3 t2]]]]?
(75)  ?This is the book which I wonder who wrote.
(76)  ?This is the book that John made the claim that he wrote.
(77)  *Which table do you wonder which books on t John will buy?

V. Conclusion