On covert movement: partially fronted wh vs. wh-in-situ

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ON COVERT MOVEMENT. PARTIALLY FRONTED *WH* VS. *WH*-IN-SITU

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1 Introduction

This paper probes the nature of covert movement. We provide evidence that covert movement can be *partial terminal* movement and can be *non-successive cyclic*. That covert movement is non-successive cyclic is indeed the null hypothesis under Fox and Pesetsky's (2005) proposal that cyclicity is a result of PF interface conditions on linearization, namely Order Preservation. We extend Fox & Pesetsky's proposal for the PF interface to the LF interface by suggesting that while the former is governed by an *Order Preservation* principle, the latter should be governed by a *Scope Preservation* principle.

2 Evidence for Covert (Terminal) Partial Movement

The argument for terminal covert partial movement is based on list readings of multiple *wh*-questions. The argument goes as follows: to account for certain list readings of multiple *wh*-questions, we must assume that ***terminal* partial movement takes place at LF** – that is, that *wh*-phrases move covertly to the edge of an embedded CP, but this position is not an intermediate stopover position (for onward, LD movement), but a position in which movement terminates: the *wh*-phrase does not move further up (to the matrix CP edge), but remains stranded at the edge of the embedded CP.[1]

This section briefly reviews two such arguments: Cheng & Demirdache's (2010) argument from so-called *trapped pair* list readings of multiple questions (section 2.1), and Kotek's (2014) argument from intervention effects in multiple questions (section 2.2). Further crosslinguistic evidence from overt multiple partial movement is provided in section 3.

[1]For related discussion concerning overt partial movement, see den Dikken (2010) who takes the more radical position that "movement to an A'–specifier position is always terminal".

2.1 Trapped pair-list readings (Cheng & Demirdache 2010)

Cheng & Demirdache discuss pair-list readings of multiple *wh*-questions arising in configurations such as (1) involving Long-Distance (LD) questions with three *wh*-phrases, two of which are embedded *in-situ* within a subordinate clause. They show that configurations such as (1) allow a pair list reading, which they call the *trapped pair-list* reading, where the two embedded *wh*s are paired independently of the matrix *wh*-phrase, as illustrated in (2d):

(1) $[_{CP1}\ wh_1 \ldots. [_{CP2}\ \ldots wh_2 \ldots. wh_3]$

(2) a. Which parent thanked Mary for giving which child which toy?
b. ✓ *Single triple*:
Zoey thanked Sam for giving Sybren a plane.
c. ✓ *List of triples*
Zoey thanked Sam for giving Sybren a plane, and Noël thanked Amina for giving Zara a ball.
d. ✓ *Trapped pair-list*: *Pairing the 2* WH*s within the embedded clause*:
Zoey thanked Sam for giving Sybren a car, Amina a plane, and Zara a ball.

The LD multiple question in (2a) with two *wh*-phrases *in-situ* within the embedded (purpose) clause allows, alongside the single triple answer in (2b) (e.g., only one triple parent-child-toy) and the list of triples answer in (2c) (e.g., multiple parent–child–toy triples), the trapped pair list reading in (2d), which only pairs the two *whs* within the island. Note, crucially, that, on the trapped pair-list reading in (2d), all three *whs* are answered; the list of pairs, however, is confined to the island. That is, the answer in (2b) supplies a single value for the highest *wh*, base-generated in the matrix, while pairing different values for the two *whs* within the island. This is the trapped pair-list reading.[2]

Cheng & Demirdache argue at length that the list of triples reading in (2c) and the trapped pair-list reading in (2d) are two distinct readings with their own respective LF syntax: the latter involves multiple partial-movement of the *whs* to the left periphery of the subordinate clause, while the former involves multiple (non-cyclic/one single step) LD movement to the periphery of the matrix clause.

In Cheng & Demirdache (2010), the argument that the trapped pair-list reading involves partial movement comes from Romanian, where the syntax of the trapped pair-list reading is overt (Ratiu 2005). As shown in (3a), overt multiple (or single) extraction across an island is not allowed in Romanian (nor could the embedded *wh* remain in-situ). The question in (3a), however, can be rescued by partial *wh*-movement to the left periphery of the island, as in (3b), which allows the single pair answer in (3c), but *not* the pair-list answer in (3d). With this in mind, consider the interpretation of the multiple question in (4) with three *wh*s, two of which have been partially fronted to the left edge of the island.

[2]Note that (2a) also allows a list of trapped pairs answer (e.g. Zoey thanked Sam for giving Sybren a car and Amina a plane, and Noël thanked Zara for giving Rosa a train and Max a ball). Crucially, what is not possible is an answer that pairs the matrix *wh* with one of the embedded *wh*s to the exclusion of the other embedded *wh*. For extensive discussion of trapped pair lists and their analysis, see Cheng &Demirdache (2010), as well as Dayal (to appear).

(3) a. *[$_{CP1}$ **cine$_i$ ce$_k$ t$_i$** o cunoaşte pe studenta
who what CL.3.FS know PREP student
[$_{CP2}$ căreia i s-a dedicat **t$_k$** ieri
which.DAT CL.DAT.3SG EXPL.AUX dedicated yesterday
Intended: 'Who knows the student to whom was dedicated what yesterday?'

b. √[$_{CP1}$ **cine$_i$ t$_i$** o cunoaşte pe studenta
who CL.3.FS know PREP student
[$_{CP2}$ căreia **ce$_k$** i s-a dedicat **t$_k$** ieri
which.DAT what CL.DAT.3SG EXPL.AUX dedicated yesterday
'Who knows the student to whom was dedicated what yesterday?'

c. √*Single pair*: Vlad knows the student to whom a poem was dedicated yesterday.

d. **List of pairs*: Vlad knows the student to whom a poem was dedicated yesterday, Filip knows the student to whom a song was dedicated yesterday.

(4) [$_{CP1}$ cine$_i$ [$_{IP1}$ t$_i$ o cunoaşte pe studenta [$_{CP2}$ căreia unde$_j$ ce$_k$
who CL.3.FS know PREP student REL.DAT where what
i s-a dedicat t$_k$ t$_j$ ieri]
CL.DAT.3SG EXPL.AUX dedicated yesterday
Lit: 'Who knows the student to whom was dedicated what where yesterday?

a. √*Single triple*:
Vlad knows the student to whom a poem was dedicated yesterday at the radio station.

b. **List of triples*:
Vlad knows the student to whom a poem was dedicated yesterday at the radio station, Filip knows the student to whom a song was dedicated yesterday at a concert.

c. √*Trapped pair-lists:*
Vlad knows the student to whom *a poem* was dedicated yesterday at the *radio station*, and the student to whom a *song* was dedicated yesterday at a *concert*.

We see that multiple partial *wh*-movement to the left periphery of the island in (4) allows the single triple reading in (4a), but not the list of triples reading in (4b). Crucially, (4) also allows the answer in (4c), where all three *wh*s are answered, and where the two *wh*s trapped within the island are paired independently of the matrix. This reading is the trapped list reading that we discussed for English in (2d). Note, moreover, that the trapped pair-list answer in (4c) is in fact preferred over the single triple answer in (4a).

To recapitulate, configurations instantiating overt multiple partial movement to the edge of the embedded clause such as in (4), allow a trapped pair list reading, but do not allow a list of triples reading, as schematized in (5).

(5) *(Overt) multiple partial movement*
Wh1 **t$_1$** [$_{ISLAND}$ Wh2 Wh3 **t$_2$** **t$_3$** √Trapped pair-list *****List of triples

Conversely, configurations instantiating multiple LD movement to the edge of the matrix clause such as (7) below (which involves movement across a complement clause), allow a list of triples readings but do not allow trapped pair-list readings, as schematized in (6).

(6) *(Overt) multiple full movement*
Wh1 Wh2 Wh3 t_1 [COMPLEMENT t_2 t_3 √List of triples *****Trapped pair-list

(7) [$_{CP1}$ $cine_i$ $unde_j$ ce_k t_i crede că a cumpărat Maria t_k t_j
who where what believe that has bought Maria
'Who believes that Maria bought what where?'
Answer: *Vlad* believes Maria bought a *piano* in *Spain*, and *Filip* believes Maria bought a *trumpet* in *Portugal* (list of triples enforced[3])

Cheng & Demirdache conclude from the complementary distribution of the list readings in Romanian (5) vs. (6) that the trapped pair-list reading and the list of triples reading have a distinct LF syntax. In particular, the trapped pair-list reading cannot be derived from/reduced to the list of triples reading – that is, if the set of propositions that are possible answers on the trapped list reading (e.g. (4c)/(2d)) were generated as a subset of the set of propositions that are possible answers on the list of triple reading (e.g. (4b)/(2c)), we would expect these two readings to be equally available in Romanian in the same syntactic environments: (5)/(4) should allow a list of triples reading, and conversely, (6)/(7) should allow a trapped pair-list reading. In other words, as Romanian overtly illustrates, each reading has its own syntax: trapped pair-lists involve multiple partial movement, while lists of triples involve multiple full movement.

Extending this analysis to the English multiple question in (2a), the difference between (2c), the list of triples reading, and (2d), the trapped pair-list reading, is thus a difference between LF movement of all the *wh*-phrases to the matrix, and *partial* LF movement of the *wh*-phrases to the edge of the embedded clause. (2d) thus has the simplified LF representation in (8a), while (2c) has the simplified LF representation in (8b).[4]

(8) a. *Trapped pair-list reading*
Which parent$_i$ t_i thanked Mary [[which child]$_j$ [which toy]$_k$ for giving t_j t_k]]
b. *List of triples reading*
[$_{CP}$ [Which parent]$_i$ [which child]$_j$ [which toy]$_k$ [$_{IP}$ t_i thanked Mary for giving t_j t_k]]

Cheng & Demirdache conclude that the availability of trapped pair-list readings in English provides evidence for covert partial movement in English, suggesting in turn that partial movement may be universal. On this proposal, the difference between Romanian and English is merely that the former allows it overtly, while the latter only allows covert partial movement.

[3]Note that multiple fronting to the matrix SpecCP enforces the list reading (single pair/triple is no longer available), cf. Bošković (2001), Grebenyova (2004), and Ratiu (2005, 2011) among others.

[4]We do not have the space to discuss Cheng & Demirdache's account of list readings, which extends Sternefeld (2001) and Lipták & Zimmermann's (2007) *Indirect Dependency approach* to overt *single* partial-movement in embedded argument/adjunct clauses to covert (English)/overt (Romanian) *multiple* partial-movement in embedded argument/adjunct clauses. The basic insight driving the proposal is that on the trapped pair list reading, only the subordinate *wh*s can be paired independently of the matrix *wh*, because the subordinate clause can be interpreted as a multiple question on its own. See also Dayal (to appear).

2.2 Intervention effects (Kotek 2014, to appear)

Kotek provides further evidence for covert partial movement in English using the distribution of intervention effects in English LD multiple questions (see also Kotek & Erlewine to appear). The relevant pattern is illustrated in (9). In (9a), the intervener, *only*, is positioned above the in-situ *wh*-phrase, but inside the island. This configuration licenses a pair-list reading.

(9) a. *Intervener inside the island*:
Which linguist will come [if we *only* invite which philosopher]?
Pair-list reading available:
√Chomsky will only come if we invite Quine, Kayne will only come if we invite Lewis…
b. *Intervener above the island:*
Which linguist will *only* come [if we invite which philosopher]?
*Pair-list reading

In contrast, in (9b), the intervener, *only*, is positioned in the matrix, above the island containing the *wh*-phrase. In this case, the pair-list reading is not available. Kotek takes the distribution of intervention effects as a diagnostic for whether or not covert *wh*-movement has occurred (following Pesetsky's 2000 line of reasoning). The premise is that there are two strategies for interpreting *wh*-in-situ: covert phrasal movement, which is *not* sensitive to intervention effects, and in-situ composition through the projection of focus alternatives, which is sensitive to intervention effects (cf. Beck 2006). The absence of an intervention effect in (9a) thus tells us that *which philosopher* has undergone covert movement (to a scope position above the intervener), while the presence of an intervention effect in (9b) tells us that *which philosopher* has not undergone movement to a scope position above the intervener. How do we reconcile these apparently conflicting conclusions? Kotek proposes that LF movement of *which philosopher* in (9a) to the edge of the embedded *if*-clause takes the *wh*-phrase out of the scope of the intervener, as illustrated in (10a), thus allowing the *wh*-phrase to combine with the matrix *wh* to yield a pair-list reading – *via* the projection of focus alternatives from the position at the edge of the island where it is stranded:

(10) a. [**CP1** wh1 C+wh [TP ... [**CP2** wh2 C-wh [**TP2** intervener ... t2 ...]]]]
b. [**CP1** wh1 C+wh [TP ... intervener ... [**CP2** wh2 C-wh [**TP2** … t2 ...]]]]

In contrast, (9b)/(10b), where the intervener is positioned above the island in the matrix, will be ruled out because the intervener in the matrix blocks the projection of the alternatives from the medial *wh* to the matrix C that must interpret them. Notice that this analysis crucially relies on the assumption that partial movement in (10) is *terminal* movement: if *wh*2, the partially moved *wh*-phrase were to move further (to the matrix CP edge), we incorrectly predict the configuration in (10b) to be immune to intervention effects, thus allowing a pair list reading, contrary to fact.

On Kotek's proposal, the unavailability of further movement from the edge of CP2 in (10) follows from its islandhood, on the assumption that covert movement shows locality effects. The problem with this assumption, however, is that it fails to generalize to contrasts such as (11) in Romanian where multiple *wh*-movement, be it partial or LD, is overt:

(11) a. [CP_1 **cine$_i$** **ce$_j$** **t$_i$** *nu* crede [$_{COMPLEMENT}$ CP_2 că **t$_j$**' am descoperit **t$_j$**
who what NEG believe that AUX.1.SG découvert
b. *[CP_1 **cine$_i$** **t$_i$** *nu* crede [$_{COMPLEMENT}$ CP_2 că **ce$_j$** am descoperit **t$_j$**
who NEG believe that what AUX.1.SG discovered

The absence of intervention effects with overt multiple movement in (11a) is expected: overt LD movement to the edge of the matrix CP voids the intervention effect of the matrix negation by removing the embedded *wh* from the scope of the intervener. Adopting Kotek's proposal that intervention effects are a diagnostic for whether covert movement has taken place, then overt partial movement in (11b) must be terminal. That is, negation in (11b) triggers an intervention effect. This is expected only if the overtly partially fronted *ce* 'what' remains in the scope of the intervener at LF. If it were to undergo further covert Spec to Spec movement from the edge of the embedded clause up to the edge of the matrix clause, then (11b) should be as good as (11a), contrary to fact.

3 Partially fronted wh vs. wh in-situ

We now turn to differences between partially fronted *wh*s and *wh*-in-situ. Compare first the English LD multiple question in (12) with its Russian counterpart in (13). As is well known, the in-situ *what* in (12a) can either be assigned embedded scope and be paired with the medial *wh* (12b), or be assigned matrix scope and be paired with the matrix *wh* (12c). In languages where *wh*-phrases cannot remain in-situ, as in Romanian or Russian, the counterpart of (12) involves multiple partial movement, as in (13), which only allows an answer to the matrix *wh*.

(12) a. Who asked/knows where Zara bought what?
b. Sybren asked/knows where Zara bought what.
c. Sybren asked/knows where Zara bought cars, and Amina asked/knows where Zara bought planes.

(13) *Russian* (Sergey Avrutin, Arthur Stephanov, p.c.)
Kto sprosil/znaet gde **chto** kupila Marija?
who asked/knows where **what** bought Marija
Only matrix *wh* answered: e.g., 'John asked/knows where Marija bought what.'

The difference between (12) and (13) is that the former involves *wh*-in-situ inside the *wh*-complement clause, while the latter involves a *wh*-phrase partially fronted to the left edge of the *wh*-complement clause. Unlike w*h*-in-situ, the partially fronted *wh*-phrase cannot be paired with the matrix *wh*: it can only get interpreted downstairs inside the embedded *wh*-clause.

Consider now the Hungarian paradigm in (14) discussed in Dayal (to appear) ((14a) originally from Surányi (2006)), which illustrates the same generalization found in (12) vs. (13), but this time, within the same language, since Hungarian is a multiple fronting language that allows *wh*-in-situ in some cases.

(14) a. melyik versenyző dicsekedett, hogy hol végzett melyik versenyen?
which sportsman boasted that where finished which competition-on
'Which sportsman boasted about where he finished in which competition?'
√Pair-list of *which sportman* and *which competition*:

a'. George boasted about where he finished in the tennis competition, and Max boasted about where he finished in the golf competition,
*Pair-list of *which sportman* and *where*
√Single triple

b. melyik versenyző dicsekedett, hogy hol melyik versenyen végzett?
which sportsman boasted that where which competition-on finished
*Pair-list of *which sportman* and *which competition*
*Pair-list of *which sportman* and *where*
√Single triple

Surányi (2006) points out that when the *wh*-phrase *melyik versenyen* 'in which competition' stays in-situ, as in (14a), the sentence can have a pair-list reading pairing the matrix *wh* with the in-situ *which competition*. This LD pair-list reading, however, disappears in (14b), where *which competition* has undergone overt partial movement to the periphery of the embedded clause. Once again we see that while *wh*-in-situ can be assigned matrix scope to be paired up with the matrix *wh,* neither of partially fronted *wh*s (be it *which competition* in (14b) or *where* in (14a/b)) can be paired up with the matrix *wh*.[5]

These contrasts between *wh*-in-situ and partially fronted *wh* raised two related questions.

(i) Why can't the partially fronted *whs*, be it in Hungarian (14a/b), Russian (13), or for that matter Romanian (11b), be paired with the matrix *wh*? That is, why must these partially fronted *wh*s remain in their surface scope position at LF?

(ii) In contrast, why can the in-situ *wh*s in (12) and (14a) be paired with the matrix *wh*? In the next section, we speculate on a uniform answer to these two questions.

4 Interface Constraints: Order vs. Scope Preservation

That *wh* in-situ can be paired with the matrix *wh* even across an island, as is the case in (12), suggests that *wh*-in-situ can undergo covert non-successive cyclic (single swoop) movement to the matrix scope position. That covert movement need not be successive cyclic is the null assumption under Fox & Pesetsky's (2005) proposal that obligatory successive cyclic movement in the syntactic computation is driven by PF requirements (namely, the principle of Order Preservation). In particular, for Fox & Pesetsky (2005), successive cyclic movement is enforced to satisfy PF interface conditions on the syntax/phonology mapping such as linearization. Since overt movement precedes linearization, it will show cyclicity effects. In contrast, covert movement applies after linearization and, as such, does not fall under Order Preservation. Successive cyclic movement will thus never be enforced with covert movement.

We expect, however, the requirements that drive covert/LF movement to care about scopal hierarchies since covert movement serves essentially to establish (relative) scope. The idea

[5](14b) also allows the trapped pair-list reading in (i) (Surányi p.c.). Crucially, this reading must be kept distinct from the LD pair list reading in (14a') under discussion. On the LD pair-list readings in (14a')/(12c), only the paired *wh*s are assigned matrix scope (answered). That is, the fronted *wh*s (be it in English (12c) or Hungarian (14a')) do not participate in the list answer. In contrast, on the trapped pair-list reading, all three *wh*s are assigned matrix scope (and thus answered) but only the two *wh*s trapped in the island are (and can) be paired independently of the third *wh*.

(i) George boasted that in last year's competition he finished in first position and in this year's competition, he finished in second position.

would then be to extend Fox & Pesetsky's proposal for the PF interface to the LF interface by assuming that while the former is governed by an *Order Preservation* principle, the latter would be governed by a *Scope Preservation* principle. At the PF interface, the derivation crashes if the ordering statements, established at the various points in the derivation where a given phase is spelled out, are contradictory. At the LF interface, on the other hand, the derivation crashes if the scopal statements, established at the various points in the derivation where movement to a given scope position takes effect, are contradictory.

With this in mind, let's turn to the issue of why partially fronted *whs*, either in Russian (13) or Hungarian (14b), must remain in their surface scope position. The issue is how to filter out the derivation in (15) where *wh2* or *wh*3 overtly raise to the matrix Spec CP, tucking in under *wh1*:

(15) a. *Partially fronted Wh:*
[$_{CP1}$ Wh1 [$_{IP1}$ ... [$_{CP2}$ that [$_{IP2}$ **Wh2** [$_{IP2}$ **Wh3** [$_{IP2}$ ... t2 ... t3 ...]]]]]]
b. *Subsequent covert spec-to spec movement:*
*[$_{CP1}$ Wh1 [$_{IP1}$ **Wh3** ... [$_{IP1}$ ... [$_{CP2}$ that [$_{IP2}$ **Wh2** [$_{IP2}$ t'3 [$_{IP2}$ t3 ... t2 ...]]]]]]]
*[$_{CP1}$ Wh1 [$_{IP1}$ **Wh2** ... [$_{IP1}$ ... [$_{CP2}$ that [$_{IP2}$ t'3 [$_{IP2}$ **Wh3** [$_{IP2}$ t3 ... t2 ...]]]]]]]

At the point in the derivation shown in (15a) where both *wh*2 and *wh*3 have been fronted to their (surface) subordinate scope position, scopal statements can be established. Assuming the segment theory of adjunction, *wh*2 and *wh*3 in (15a) do not c-command each other (since the adjoined IP2 projections do not exclude either *wh*2 or *wh*3) and thus have the same scope (i.e., they do not have scope over one another). The derivation then crashes in (15b) because subsequent Spec-to-Spec movement of *wh*2 (for instance) to the matrix scope position yields a conflicting scopal statement since *wh*2 now outscopes *wh*3.

In contrast, in the English multiple question in (12), *wh*3 hasn't raised overtly to a scope position (unlike its Russian counterpart in (13)/(15a)), as schematized in (16a).

(16) a. *Wh-in-situ:*
[$_{CP1}$ Wh1 [$_{IP1}$ ... [$_{CP2}$ Wh2 [$_{IP2}$ ... t2 ... **Wh3** ...]]]]
b. *Covert one swoop movement:*
√ [$_{CP1}$ Wh1 [$_{IP1}$ **Wh3** [$_{IP1}$ ... [$_{CP2}$ Wh2 [$_{IP2}$ t2 ... t3 ...]]]]]

The idea is that the derivation in (16) will not yield conflicting scopal statements because the (relative) scope of the two *Wh*s (*Wh*2 and *Wh*3) cannot be computed prior to the step/moment in the derivation where they both have raised to scope positions – that is, prior to (16b). Long movement of *wh3* in (16b) is thus not constrained by Scope Preservation.[6]

[6]Scope Preservation could carry over to explain the intervention effect of NEG with overt PM in Romanian (11b), since covert spec-to-spec raising in (ib) reverses the scope of *Wh*2 established via movement in (ia) relative to NEG:

(i) a. Overt partial movement: [$_{CP1}$ Wh1 ... [$_{IP1}$ ... NEG … [$_{CP2}$ **Wh2** [$_{IP2}$ ... t2 ... ...]]]]]
b. Covert spec-to-spec movement: *[$_{CP1}$ Wh1 [$_{CP1}$ **Wh2** ... [$_{IP1}$ ... NEG … [$_{CP2}$ t'2 [$_{IP2}$ t2 ... ...]]]]]

The astute reader will have noticed, however, that once we allow covert non-successive cyclic movement, an alternative account (to Kotek's account in (10b)) needs to be sought for the intervention effects in (9b) with *wh*-in-situ in English.

Let's now see how to handle the earlier contrast we gave between the English multiple question in (2a) with two *wh*-phrases phonologically *in-situ* within the subordinate island, and the Romanian multiple question in (4a) with two *wh*-phrases *overtly fronted* to the edge of the subordinate island. We expect the English LD question in (2a) to allow either the triple-list reading in (2c) or the trapped pair-list reading in (2d). This is because the in-situ *wh*-phrases are free to undergo covert non-successive cyclic (single swoop) movement either to the edge of subordinate scope position, yielding the trapped pair-list reading (as in (8a)), or to the edge of matrix scope position, yielding the list of triples reading (as in (8b))

In contrast, the Romanian multiple question in (4a) allows the trapped pair-list reading in (4d), but not the triple-list reading in (4c). This means that covert spec-to-spec movement from the edge of the island in (17a)/(4a) to the edge of matrix in (17b) must be ruled out. This is indeed the case since the derivation in (17) yields conflicting scopal statements in violation of Scope Preservation: at the step of the derivation in (17a), *wh*2 (the relative operator *căreia*) outscopes both *wh*3 and *wh*4 (which have the same scope), while at the step of the derivation in (17b), both *wh*3 and w*h*4 now outscope *wh*2.

(17) a. ***Overt*** *partial movement to the periphery of the relative clause island:*
[$_{CP1}$ who$_{\mathbf{1}}$ ... [$_{IP1}$ ... [$_{CP2\ ISLAND}$ **which$_{\mathbf{2}}$** [$_{IP2}$ where$_3$ [$_{IP2}$ what$_4$ [$_{IP2}$ ... t$_{\mathbf{2}}$ ... t$_4$ ... t$_3$ ...]]]]]]

b. *Covert spec-to spec movement to the matrix periphery:*
*****[$_{CP1}$ who$_{\mathbf{1}}$[$_{IP1}$ where$_3$[$_{IP1}$ what$_4$[$_{IP1}$... [$_{ISLAND}$ **which$_{\mathbf{2}}$**[$_{IP2}$ t'$_3$[$_{IP2}$ t'$_4$[$_{IP2}$ ...t$_{\mathbf{2}}$ ... t$_4$ ... t$_3$]]]]]]]]

In all the LF configurations considered so far, partially fronted *wh*s are confined to their surface scope position since subsequent covert movement out of their surface scope position yields a violation of Scope Preservation ((15)/(17)). We should not, however, hastily conclude that partial movement is always terminal movement. This appears to be too strong in light of (18), which instantiates overt multiple *partial* movement to the edge of the complement clause:

(18) a. [$_{CP1}$ cine a spus [că ce when va offeri satului
who said that what when will offer the village
'Who said that he will offer the village what, when?'

b. √*List of triples*: Vlad said he will offer the village a theater for Christmas and Filip said he will offer the village a library for the New year.

c. √*Trapped pair-lists:* Vlad said he will offer the village a theater for Christmas and a library for New year.

The attentive reader will have noticed that Romanian multiple *wh*-questions involving movement from a complement clause differ from multiple *wh*-questions involving movement from an island in two respects. First, they allow **overt** multiple LD extraction to the matrix Spec CP (compare the grammatical (7) with the ungrammatical (3a)). Second, they must also allow for **covert** LD extraction from the edge of the complement clause in (18a)/(19a) to the edge of the matrix in (19b) since the multiple question in (18a) with two *wh*-phrases *overtly fronted* to the edge of the complement clause allows for the list of triples reading illustrated in (18b).

(19) a. ***Overt*** *partial movement to the periphery of the complement clause:*
[$_{CP1}$ who$_{\mathbf{1}}$ ... [$_{IP1}$ ... [$_{CP2}$ that [$_{IP2}$ **what$_2$** [$_{CP2}$ **when$_3$** [$_{IP2}$ ... t$_{\mathbf{2}}$ ... t$_3$ ...]]]]]

b. *Covert spec-to spec movement to the matrix periphery:*
√ [$_{CP1}$ who$_{\mathbf{1}}$ [$_{IP1}$ **what$_2$** [$_{IP1}$ **when$_3$** [$_{IP1}$ ... [$_{CP2}$ that [$_{IP2}$ t'$_2$ [$_{IP2}$ t'$_3$ [$_{IP2}$ ... t$_{\mathbf{2}}$ ... t$_3$...]]]]]]]

These two differences between Romanian multiple *wh*-questions involving movement from a complement clause vs. an island are expected under the proposal sketched here. **Overt** multiple LD extraction to the matrix Spec CP is (7) will be allowed as long as it proceeds successive cyclically in order to satisfy *Order Preservation*, the PF interface condition on the syntax/phonology mapping. **Covert** multiple LD extraction from the edge complement clause to the matrix Spec CP is (19a-b) will be allowed as long as it satisfies *Scope Preservation*, the LF interface condition on the syntax/semantics mapping. This is indeed the case on the (tucking in) derivation in (19) since covert movement of *wh*2 and *wh*3 in (19b) does not reverse the scopal relations computed at the step of the derivation in (19a).

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