Less Movement is More Minimalist Movement

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Abstract: This paper explores aspects of movement under minimalism. Taking *wh*-movement as a point of departure, standard assumptions about the mechanics of movement are subjected to critical scrutiny. It is argued that intermediate copies are unmotivated and a multiattachment alternative to successive-cylic movement is proposed. While the syntactic part of movement reduces to the linking of a probe feature to a matching goal feature, it is shown that this operation *per se* is unbounded and that locality requirements are instead introduced through Spell–Out to PF. It is also argued that all apparent successive-cylic effects—such as the pronunciation of lower *wh*-copies—are head rather than phrasal effects because they derive from the intervention of heads in the Spell–Out process. Extending the approach to A-movement, it is suggested that pronominal clitics under doubling and the pronominal portion of bipartite reflexives can be similarly treated as the realization of case and φ features on an intervening head.

1. Introduction

The rationale behind transformational-generative grammar's movement metaphor was the simple fact that language countenances discontinuous dependencies. Despite technological advances such as the introduction of traces and their subsequent replacement by copies, the mechanics of movement *per se* have remained essentially unchanged under GB and minimalist revisions to the theory. In this paper I subject these mechanics to critical scrutiny, arguing that, of the three standard properties of discontinuous dependencies, only something akin to what Johnson (n.d.) characterizes as "semantic displacement" truly belongs in the syntax. Locality—traditionally forced by bounding limitations on movement and buttressed by island as well as apparent intermediate movement effects, is claimed to be an artifact of Spell–Out to PF. The fact that all such effects are instantiated as head rather than phrasal phenomena is taken to derive from entanglement with intervening heads in the process of mapping to PF syntactic representations which involve non-local featural dependencies. In the system advanced here and described in more detail in Franks (2014), such dependencies are represented in multiattachment terms.

It should be noted that this move to revisit locality as a response to PF demands is part of a larger recent shift in how syntax is conceptualized. Much of what has traditionally been regarded as part of the syntax proper can be seen as limitations imposed on syntactic structures by the need for pronunciation. Not only is the fact that displacement does not result in iterated pronun-

ciations—the property Johnson (n.d.) calls "terseness"—a matter of chain-reduction under Spell–Out, but also phenomena such as the sometime pronunciation of lower copies and indeed linearization itself are commonly seen as accommodations coerced by the need to render syntactic representations amenable to the exigencies of PF. I have made this case extensively in Franks (2010, 2011), but am hardly unique in having reached the conclusion that, in the division of labor between syntax and PF, the burden has now decidedly shifted towards PF.

Although locality and its handmaiden successive-cyclic movement have for the most part resisted this shift, probably because of their decidedly syntactic character, it has long been clear that there is something awry with intermediate movement. Within a minimalist context, Contreras (2014) rightly observes that the "existence [of intermediate traces or copies] is an anomaly which requires unmotivated technical devices." Along with many others, he raises the obvious conceptual issue of what motivates intermediate movement under minimalism, since minimalism, unlike GB and its predecessors, demands that all operations find motivation.

Consider a derivation such as (1), shown here with both GB traces and minimalist copies:

(1) a. [$_{CP}$ What$_1$ does [$_{IP}$ David think [$_{CP}$ t_1 (that) [$_{IP}$ Julia read t_1]]]]?
b. [$_{CP}$ **What** does [$_{TP}$ David think [$_{CP}$ what (that) [$_{TP}$ Julia read what]]]]?

Whereas the top C is [+Q] and it is this feature which drives the last step of movement, it is far from clear why the first step takes place. Probably the most widely adopted minimalist solution (and certainly in my view the most *ad hoc*) is Chomsky's (2000, 2008) use of an EPP feature on the intermediate C, later generalized to an "edge" feature of the phase head. Either way, the feature must be optional, since there is no movement in (2):

(2) [$_{CP}$ [$_{TP}$ David thinks [$_{CP}$ (that) [$_{TP}$ Julia read *War and Peace*]]]]

An alternative, as in e.g. Bošković (2007), is to locate the relevant feature on the *wh*-phrase itself. This too must be optional, given that, rather than generate (3b), *what* stays in-situ in (3a):

(3) a. [$_{CP}$ **Who** [$_{TP}$ who thinks [$_{CP}$ (that) [$_{TP}$ Julia read **what**]]]]?
b. * **Who** thinks **what** (that) Julia read?

The problem posed by the ungrammaticality of (3b) is one of "look ahead": *what* cannot "know" that it should not move to the local SpecCP without looking outside its own clause.[1]

In this paper I argue that the moral to be drawn from (3) is that movement which hypothetically starts but cannot be completed, i.e., "failed" movement, should not be allowed to start

[1] A different approach is to treat intermediate movement as motivated by the need to situate the moving element at a phase edge so as to be accessible to a potential higher probe—movement which is, in the terminology of Franks (2006), "agnostic." Agnostic *wh*-movement similarly suffers from the look-ahead problem of (3b), although Franks and Lavine's (2006) agnostic treatment of A-movement similarly (for shifted arguments in Lithuanian) does not.

in the first place. Concomitantly, "successful" movement, as in (1), can only be launched once the motivating feature has been inserted into the structure—in the case of *wh* movement, the interrogative [+Q] feature that provides the *wh* expression with its scope at LF. Corollaries of this claim are that successive-cyclic movement does not exist and that there are no intermediate landing sites. Following my proposals in Franks (2014), there is an alternative to the successive-cylic movement scenario in which the syntactic part of movement is reduced to the linking of a probe feature to a matching goal feature, with the actual "movement" of the category containing that feature ultimately a matter of Spell–Out.

While on the one hand there are certain phenomena which are problematic for traditional successive cyclic accounts,[2] on the other hand the syntax literature is replete with apparent intermediate movement effects. Contreras (2014) mentions five classic arguments for intermediate landing sites, but maintains for each either that the facts require further scrutiny and/or are contentious or that there are dubious aspects to successive-cylic analyses, concluding that "until these matters are resolved, we cannot determine whether the facts in question require successive cyclicity or not." Be that as it may, it seems to me introvertible that intermediate effects of some type do exist. Capturing these thus poses a serious yet hardly insurmountable challenge to any system which lacks successive cyclicity. If nothing else, representational approaches such as HPSG manage this fine, using notions such as feature-sharing and percolation of non-local information (such as the presence of a gap, notated as a "slash" feature). In what follows I will consider several such phenomena and demonstrate that their properties follow from a model in which movement proceeds in "one fell swoop" rather than successive-cyclically and that all intermediate effects arise through the attempt to form a chain for Spell–Out purposes. All such effects are therefore necessarily head effects, no intermediate specifier positions having been created along the way.

2. Some Intermediate Effects of Overt Movement

Let us now consider a few relevant examples. One is agreement along the path of putative *wh*-movement, as in (4) from Kilega (cf. Carstens 2010):

(4) [$_{CP}$ **Biki** *bi-* [$_{TP}$ pro b- á- tend- ílé [$_{CP}$ biki *bi-* [$_{TP}$ pro
8what 8CA- 2SA- ASP- say- PERF 8CA-
b- á- gúl- ílé biki]]]]
2SA- ASP- buy- PERF
'What did they say they had bought?'

This is clearly a marking on an intervening functional head, here presumably C.

[2] Contreras's (2014) catalog of relevant phenomena includes (i) Postal's observation that prepositions cannot strand mid-stream (although du Plessis (1977: 724) states that this is possible in Afrikaans); (ii) the failure of intermediate *wh*-traces to block *wanna*-contraction; and (iii) the dubious role of intermediate *wh*-traces in the "*that* trace effect."

Another such effect is seen in the *wh*-copying construction in colloquial German (5):[3]

(5) a. [$_{CP}$ **Wen** glaubt Hans [$_{CP}$ ***wen*** [$_{TP}$ Jakob wen gesehen hat]]]?
'Whom does Hans believe (whom) Jakob saw?'

b. * [$_{CP}$ **Welchen Mann** glaubst du [$_{CP}$ ***welchen Mann*** [$_{TP}$ sie welchen Mann liebt]]?
(cf. Welchen Mann glaubst du daß sie liebt? 'Which man do you believe that she loves?')

While a *wh*-head can appear in the intermediate C^0 in (5a), the comparable but unequivocal phrase in (5b) does not allow *wh*-copying. Moreover, as revealed by the lower Rhine dialect example in (6), if anything is pronounced there, it will be a featurally compatible head.

(6) **Welchen Mann** denkst du [$_{CP}$ ***wen*** [$_{TP}$ er welchen Mann kennt]]?
'Which man do you think (whom) he knows?'

Crucially, what (6) shows is the phrase being pronounced in the matrix SpecCP and a compatible head being pronounced in the intermediate C^0. I take this to be a morphological fact: any potential intermediate position will be dominated by a head, here C^0, but pronunciation of the *wh*-phrase there would be morphologically incompatible—a phrase in a head position is ineffable. In (5) this is resolved by reanalyzing *wen* as a head and in (6) by spinning off the φ-features, also to be realized as a head.[4] In Section 6, I will suggest that pronouns can be similarly induced under A-movement.

3. The Model, in a Nutshell

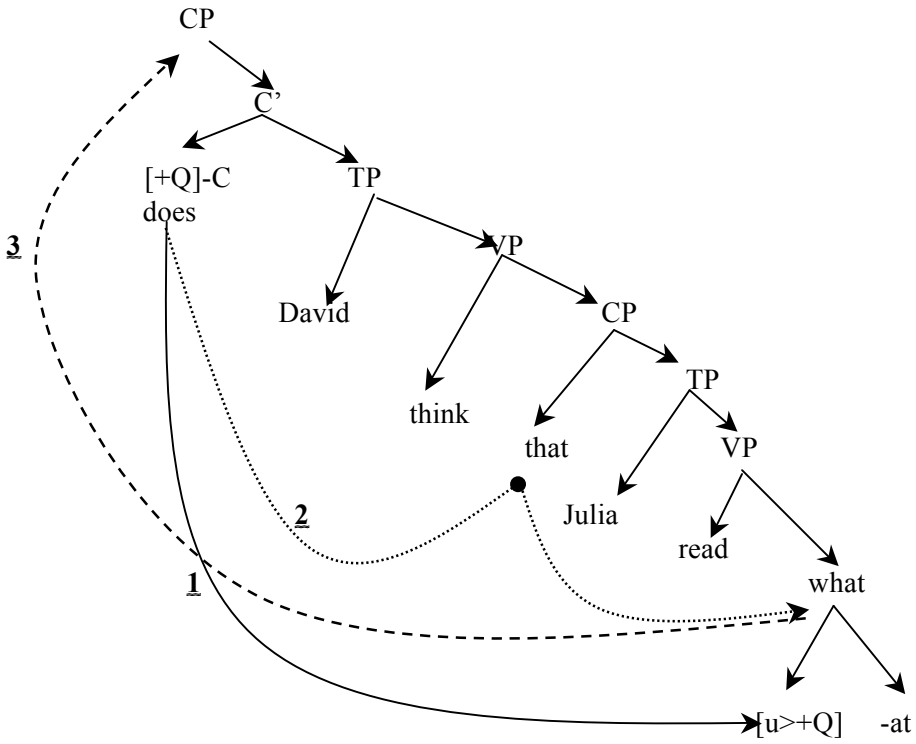
As stated, "movement" only occurs when truly motivated (rather than stipulated), i.e., only at the point when the triggering feature is introduced, creating long-distance associations and, ultimately, "one fell swoop" movements. The syntax thus establishes relations between relevant sets of features rather than between words or phrases *per se*. This is shown as Step I in the diagram in (7), where the [+Q] on the matrix C is linked to the unvalued Q feature on *what*, causing it too to become [+Q]. Step I is tantamount to LF-movement, from which follows the fact, discussed in Section 5, that there are no LF islands or other intermediate movement LF effects. In order to pronounce something, however, Spell–Out needs not just an isolated [+Q] feature, but semantically cohesive bundles of features that will be large enough to provide corresponding lexical items. This leads to the second step depicted in (7). Step II is the search for material associated with the featural link established in the syntax, and it is this step, a precursor to actual movement, which introduces intermediate movement and *wh*-island effects. Intuitively, what happens is that the [+Q]-C traverses the tree in search of the phrasal constituent(s) containing the [Q] linked under Step I. In doing so, it inspects (or, more graphically, becomes entangled with) categorially

[3] Examples such as (5) are widely discussed in the literature; cf., e.g., Fanselow and Mahajan (2000), Nunes (2004: 38–43), Felser (2004), or Rett (2006). Example (6) is from Fanselow and Ćavar (2001: 133).

[4] My morphological approach, although the details are very different, shares insights with that of Nunes (2004).

similar heads, especially other Cs. All intermediate movement effects are thus head effects because they are produced by Step II.[5] Step III is the actual movement step, the last relevant part of mapping to PF. Pronunciation ultimately requires access to morpho-phonological information, in the effort to pronounce constituents containing multiattached features. But phrasal *what* cannot be pronounced under [+Q]-C in (7), because this is a head position (and because C^0 will already be occupied by *does*). So this last step is the traditional, visible part of movement, namely the process whereby constituents are attached as close as possible to the "attracting" feature.

(7)



Here is summary of the properties of these steps, as elaborated in Franks (2014):

(8) Step I: [+Q] is freely linked with any [uQ]

a. this happens as soon as [+Q] enters the structure

b. [+Q] is consequently at the top, so linking can only be down (i.e, not with some higher [wh])

[5] Island effects, which due to space constraints cannot be discussed here, result from the search canceling if an intervening head already has specified values (for similar, hence conflicting features). Hornstein, Lasnik, and Uriagereka (2003) also suggest that island phenomena should be relegated to PF.

c. [+Q] can link with as many [uQ] as it wants, except:
   i. if it links with none, then the derivation crashes in LF[6]
   ii. for non multiple question languages (e.g., Italian), it links with just one

(9) Step II: [+Q]-C traverses the tree in search of phrasal constituent(s) containing [Q] linked in Step I
   a. C becomes entangled with similar heads, especially other C
   b. if the intervening head has values (for similar features), then the search cancels

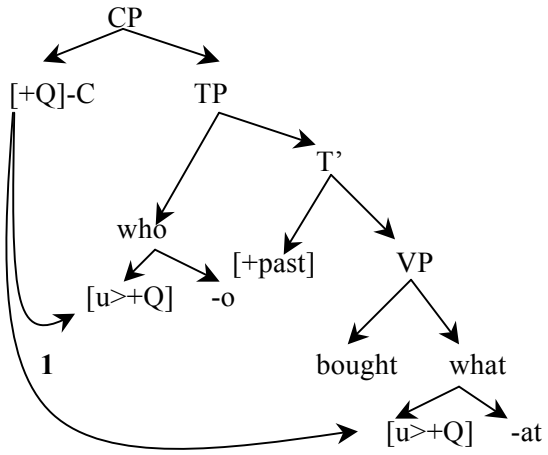
(10) Step III: *wh*-movement of accessed lexical material to [+Q][7]

4. Some Multiple *wh* Scenarios

The description of the model has been necessarily cursory. To understand it better, let us consider Step I more carefully. This process, which provides operator scope for LF purposes, is unlimited in terms of range and, at least in languages that allow multiple *wh*-questions, can apply repeatedly. Its unbounded nature is seen in the absence of LF islands in (11) and its multiple application is represented in (12).

(11) a. * **What**$_1$ did you leave the party [because of Karen's claim that she felt sick after having eaten t_1]?
   (cf. Who left the party because of Karen's claim that she felt sick after having eaten **what**?)
   b. * **What**$_1$ does Elisabeth wonder [**who** bought t_1]?
   (cf. **Who** wonders [**who** bought **what**]?)

(12)



[6] A [+Q, –wh]-C presumably links with some feature of T, hence T-entanglement effects can also arise in some languages.

[7] How large a constituent "pied-pipes" is a vexed question. My suspicion is that Step III targets the maximal unit bearing the relevant feature ([+Q], in this case), which is minimally the phrase projected by the *wh*-word at hand.

In (11) we see that material embedded within islands is perfectly accessible when the *wh*-phrase does not move overtly. In (12) the [+Q] is linked to both *who* and *what*, but in English—as opposed to multiple *wh*-fronting languages—only the first is accessed and pronounced.

Let us investigate the grammatical variant of (11b), with *what* in-situ, *Who wonders who bought what?* This is ambiguous, as indicated in (13):

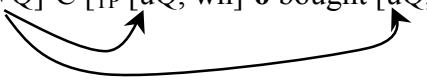
(13) Q: **Who** wonders [**who** bought **what**]?
A1: Elisabeth wonders who bought what.
A2: Elisabeth wonders who bought an apple, David wonders who bought a pear, …

The question in (13) has the (simplified) feature structure in (14):

(14) $[_{CP}$ [+Q]-C $[_{TP}$ [wh]-**o** wonders $[_{CP}$ [+Q]-C $[_{TP}$ [uQ, wh]-**o** bought [uQ, wh]-**at**]]]]

Consider now the linking possibilities when step I applies to (14). In the embedded clause, [+Q]-C can link with the [uQ] features of both *who* and *what*, as in (15a), or with those of *who* alone, as in (15b):

(15) a. … $[_{CP}$ [+Q]-C $[_{TP}$ [uQ, wh]-**o** bought [uQ, wh]-**at**]]]]



b. … $[_{CP}$ [+Q]-C $[_{TP}$ [uQ, wh]-**o** bought [uQ, wh]-**at**]]]]

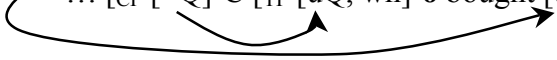
When the matrix [+Q]-C is merged and the embedded structure is as in (15a), it links with the [uQ] feature of main clause *who*, as shown in (16a). On the other hand, when the embedded [+Q]-C is as in (15b), then the main clause [+Q]-C links with the [uQ] features of both main clause *who* and embedded *what*. This is shown in (16b):

(16) a. $[_{CP}$ [+Q]-C $[_{TP}$ [uQ, wh]-**o** wonders

… $[_{CP}$ [+Q]-C $[_{TP}$ [uQ, wh]-**o** bought [uQ, wh]-**at**]]]]

b. $[_{CP}$ [+Q]-C $[_{TP}$ [uQ, wh]-**o** wonders

… $[_{CP}$ [+Q]-C $[_{TP}$ [uQ, wh]-**o** bought [uQ, wh]-**at**]]]]



There is however a third option, not shown in (15): the embedded [+Q] could skip the [uQ] of *who* and just link with that of *what*. This possibility depicted in (18), does not give rise to the sentence in (13). The problem is that Spell–Out (i.e., Steps I and II) will then cause *what* rather

than *who* to front in the embedded clause. And indeed, this is what happens in the embedded clause in (17), which under the proposed system is able to escape Superiority:

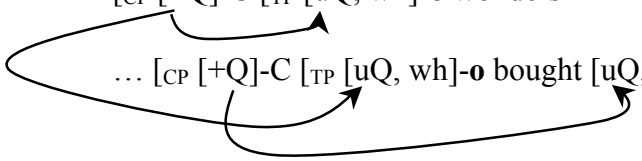
(17) Q: **Who** wonders [**what who** bought]?
A: Elisabeth wonders what David bought, Karen wonders what Julia bought, …

This surprising result is not expected under traditional approaches but follows straightforwardly from the way Step I works. Consider the derivation. In the embedded clause, [+Q] is free to skip the first [uQ] and link only with the second one, as in (18). Then, when the matrix [+Q]-C merges, it links with the [uQ] features of both *who* subjects, as depicted in (19).

(18) … [$_{CP}$ [+Q]-C [$_{TP}$ [uQwh]-**o** bought [uQ, wh]-**at**]]]]

(19) [$_{CP}$ [+Q]-C [$_{TP}$ [uQ, wh]-**o** wonders

… [$_{CP}$ [+Q]-C [$_{TP}$ [uQ, wh]-**o** bought [uQ, wh]-**at**]]]]



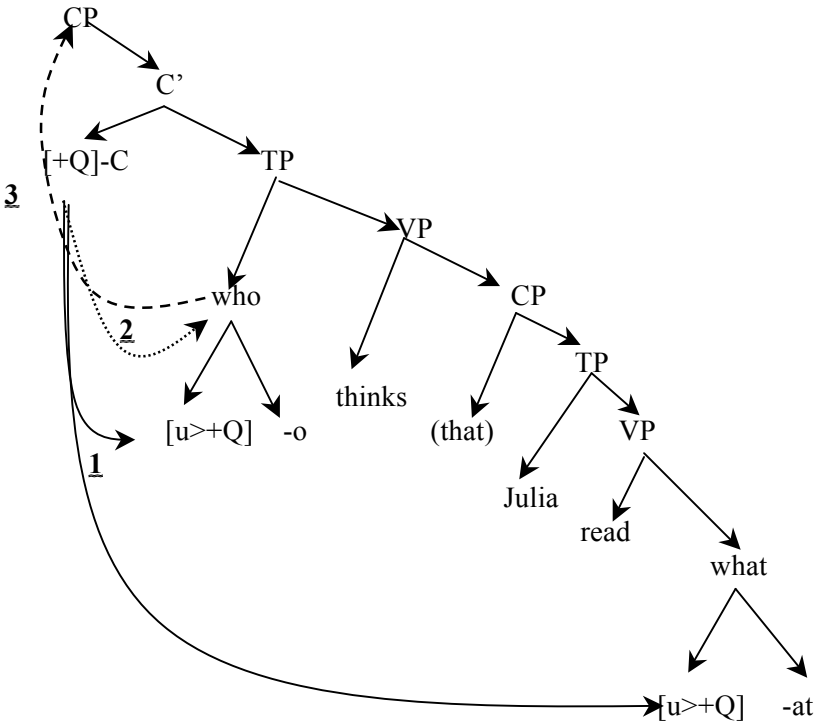
Keep in mind that all of this just involves Step I, in which [+Q] is freely linked with any [uQ], so there can be no entanglement or island effects. These arise only by virtue of Step II, which initiates Spell–Out. Spell–Out requires first to find the material dominating the linked [Q] (Step II) and then to front it (Step III). This means that, in the embedded clause in (19), *what* moves rather than *who*, producing (17), apparent flouting Superiority. The fact that (17) is unambiguous—the embedded *who* must have matrix scope—is crucial. It is the higher [+Q] which saves the derivation. This is an important consequence of my model, since it provides a reason why a simple violation of Superiority, such as (20), is much worse than (27).

(20) * John wonders [**what who** bought].

5. Timing is Everything

We saw from (3) that failed *wh*-movement never gives rise to intermediate pronunciation of the second *wh*-phrase. This makes sense, because even though it is linked by Step I to the [uQ] of both *who* and *what*, once the matrix [+Q] encounters *who* in Step II, the search ceases, so *what* is never accessed and no intermediate links are ever created, either for PF or LF purposes. This derivation is depicted in (21).

(21)



We also saw that islands for overt movement do not appear to restrict putative LF movement, and that *wh* in-situ can never be so deeply embedded that they render matrix construal impossible. Recall (11a), repeated as (22):

(22) Who left the party [because of [Karen's claim [that she felt sick [after having eaten **what**]]]]?

More generally, I argue, LF movement always behaves like *no* movement. As I show in Franks (2014), *none* of the diagnostics for intermediate *wh*-movement *ever* obtain for ostensible LF *wh*-movement. These are not easy to construct, but to illustrate the point consider one potential diagnostic, so called "V-Preposing" or inversion in Spanish, as described by (Torrego 1984).[8] This is triggered not only by a *wh*-phrase ultimately landing in SpecCP, but also by its passing through a SpecCP in the course of the derivation, as in (23a). However, in (23b) with putative LF movement of embedded *qué*, there can never be intermediate V-Preposing of *dijo* or *había publicado*.

(23) a. [$_{CP}$ **Qué** *pensaba* Juan [$_{CP}$ qué que *le había dicho* Pedro [$_{CP}$ qué que *había publicado* qué la revista]]]?
'What did Juan think that Pedro had told him that the journal had published?'

[8] But see Contreras (2014: §5.6) for criticism of inversion in Spanish as an intermediate movement diagnostic.

b. [$_{CP}$ **Quién** pensaba [$_{CP}$ qué que Pedro *dijo* [$_{CP}$ qué que Juan *había publicado* **qué**]]]?
'Who thinks that Pedro said that Juan published what?'

I turn now to intermediate binding, a textbook argument for successive cyclic movement. The English facts are seen in (24), where binding of the reflexive by *Mary* is taken as evidence that the *wh*-phrase containing *herself* must pass through the intermediate SpecCP, a position in which it is locally c-commanded by *Mary*:

(24) [$_{CP}$ **Which picture of herself** did [$_{TP}$ *Mary* say [$_{CP}$ which picture of *herself* (that) [$_{TP}$ Bill bought which picture of herself]]]]?

On the other hand, intermediate binding of *herself* by *Mary* is not possible in (25):

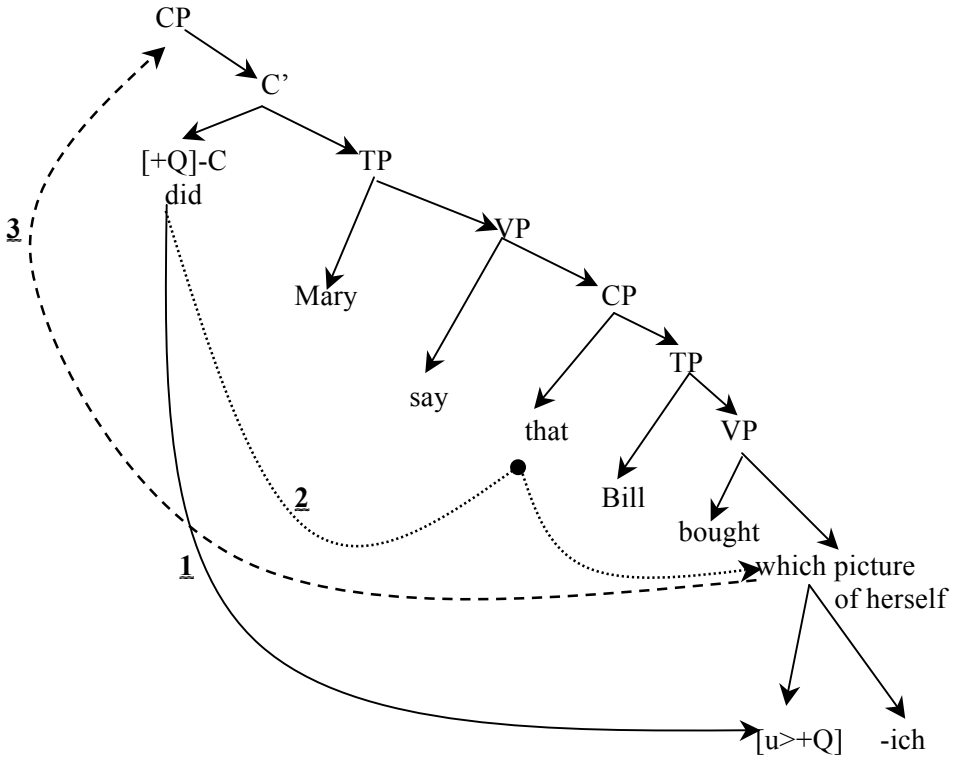
(25) * **When** did *Mary* say [$_{CP}$ which picture of *herself* (that) [Bill bought **which picture of herself**]]?

In this instance of failed *wh*-movement, *which picture of herself* does not behave as if it ever moved to the intermediate SpecCP (and then presumably retreated); instead, it patterns along with other LF movement in not countenancing pied-piping at all. In my system, this is because only the [uQ] feature of embedded *which* is ever linked to the [+Q] of matrix C.

But what about (24) and its ilk?[9] In order to make sense of these facts, we need Step II also to feed LF. That is, overt movement exhibits both island effects and intermediate movement effects. These are created by the need to Spell–Out syntactic structures to PF, but they also matter for LF. To see this more graphically, consider the diagram in (26):

[9] One mystery I put aside here is why this intermediate binding effect seems to be lacking in so many other languages. For me, this would have to be a matter of whether or not attachment to the intermediate C occurs.

(26)



Step II, launched by the matrix [+Q]-C, associates the phrase *which picture of herself* with both matrix and intermediate C. It is this latter association which facilitates the intermediate binding in (24). However, although a C^0 can dominate a DP, the phrase cannot be pronounced there. That is, a head can call up all the properties of a phrase in LF, but not in PF. In PF what happens, of course, is that the phrase is pronounced at the top of the sentence. I see this as a morphological fact—it is a matter of morphological incongruity that *which picture of herself* cannot be pronounced in C^0, even though the [+Q] in C targets it. Instead, what happens is that *which picture of herself* attaches as close as possible to the probing head feature, extending the tree by creating a new SpecCP. It is this which I have called Step III, although whether Steps II and III deserve autonomous status is actually unclear to me at this point.

Also unclear is how notions such as phase, multiple and/or independent Spell–Out to PF and LF, and linearization should be implemented. With respect to linearization, it believe it needs to happen "on-line".[10] The reason is that a good way to handle subject (and adjunct) islands is still the idea, due to Uriagereka (1999), that the LCA forces treating specifiers (and adjuncts) essentially as words so that they can be linearized when they merge with a branching projection. Thus, in (27), *our stories about what* must be built up in a separate work space and already linearized when it merges with *are disgusting.* This way, it is treated as a single entity which can asymmetrically c-command the terminals *are* and *disgusting*:

[10] In Franks (2011) I also provide an argument for iterated linearization based on the ordering of clitics in Bulgarian.

(27) a. * **What** [+Q]-C does Bob think [that [our stories about what] are disgusting]]?
b. **Who** [+Q]-C who thinks [that [our stories about **what**] are disgusting]]?)

Alternatively, it could simply be the fact, forced by the Extension Condition, that (branching) specifiers and adjuncts need to be constructed in their own work space before merging into the main tree. Either way, this cannot of course mean that the [uQ] of *what* is inaccessible when the matrix [+Q]-C is merged, otherwise (27b) would not be possible; it is just that Step II cannot look inside the phrase containing it.[11]

6. Extensions to A-movement

In this paper I have only considered A'-movement, but in fact it is the dubious status of successive cyclic A-movement that has received the most attention in the literature. Just as I question the status of an EPP-like feature driving movement to the edge of declarative CP, Epstein and Seely (2006) question the EPP in general, arguing that it has no conceptual basis and introduces many problems of its own. Of course, they still must deal with challenges to the elimination of the EPP, just as I have to for successive-cylic *wh*-movement. In sum, under their analysis, to quote, "Move is one fell swoop, from theta to case-checked position. The creation of intermediate traces, the deletion of these traces, the formation of chains (and whether they are linked), chain deletion, and the question of semantic features, or lack thereof, borne by intermediate traces, simply do not arise; nor do pervasive problems associated with trying to determine what in fact the EPP is" (Epstein and Seely 2006: 48).

Before concluding, let us consider one application of the system advanced for *wh*-movement to A-movement. If traditional GB case features serve to motivate A-movement, and the multiattachment system is adopted, then it seems to me most everything proposed for *wh*-movement should carry over in the standard cases of movement such as raising and passive. Thus, in (28) there are just the two positions indicated. Under Step I, after matrix T is merged, its nominative Case searches for an unvalued Case feature and encounters *a man*, under Step II a chain is formed, with a link to the embedded T head *to,* and finally Step III adjoins *a man* at the top of the structure, creating SpecTP.

(28) **A man** [Case(nom)]-T seems [$_{TP}$ to have been invited a man to the party]

Note also that in Step II intermediate heads must be consulted, just as with A'-movement. This is why *Bill* can be interpreted as binding *himself* in (29), even though it only moves once:[12]

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[11] Bošković (2014) argues that it is the *highest* projection associated with any type of lexical head that counts as a phase, but that this can vary. Note in this light that Step II, by looking *down* the tree, can easily identify a new phasal domain since it is the first of its type, whereas in a bottom-up approach the fact that a head is the last of its type can only be determined once a head of a new lexical type has been merged into the structure.

[12] See Epstein and Seely (2006) for discussion of this and other relevant examples.

(29) **Bill** [Case(nom)]-T appears to Mary [$_{TP}$ to seem to himself [$_{TP}$ to be 𝔹𝕚𝕝𝕝 ill]].

What happens if we enrich the system to allow movement into theta positions, as in Hornstein's (2001) theory of control? Boeckx, Hornstein, and Nunes (2008) suggest a movement theory of reflexives, and here I would like to offer an account that derives the formal structure of bipartite reflexives such as English *himself* in *The man hurt himself*. The specific analogy is with the *wh*-copying construction described for dialectal German. Consider the structure in (30):

(30) **The man** [Case(nom)]-T hurt [$_{DP}$ ***him*** [$_{ReflP}$ self [$_{DP}$ 𝚝𝚑𝚎 𝚖𝚊𝚗]]].

The pronoun *him* instantiates the stranded φ-features of the DP *a man* just as *wen* does in (6). A *man* merges with the reflexive head *self* and, when the nominative Case feature is merged in T, the unvalued case feature of *a man* is linked to it by Step I and then, when it is searched for under Step II, the D head becomes entangled and the φ-features are split off and realized as D. This raises many questions, e.g., about the role of case in the analysis and whether (30) encounters an antilocality problem (implying that English reflexives require additional structure), but the gist should be clear. A promising consequence of the analysis of the provenance of *him* is that such forms cannot arise in NP languages because there is no intervening head to cause entanglement under Step II. It also seems to me that a comparable approach to clitic doubling in Balkan languages can be constructed, where fronting of the NP contained within a KP (for Kase Phrase) causes K to be overt and match in φ-features. Thus, in Bulgarian (31), the definite feminine singular NP *kotkata* 'the cat' is topicalized but the remnant realizes the K head *ja* 'her', which ultimately will as a proclitic come to be pronounced in front of the verb *xape* 'bites'. Presumably it is a topicalization feature at work here, but, once again, this can be understood as entanglement with the intervening K^0 as Step II searches for the lexical material eventually to front.[13]

(31) **Kotkata** xape kučeto [$_{KP}$ ***ja*** [$_{DP}$ D [$_{NP}$ 𝚔𝚘𝚝𝚔𝚊𝚝𝚊]]]]
cat_{DEF} bites dog_{DEF} her_{OBJ}
'The cat, the dog bites it.'

7. Conclusion

In this paper I have put forward an account of *wh* "movement" which treats it as an artifact of the mapping from syntax to PF. While this insight is not unique to me—in the minimalist literature it is suggested by Hornstein, Lasnik, and Uriagereka (2003) and, for head movement, as early as Chomsky (1995)—the multiattachment model is new, as is its implementation of the generalizations that intermediate effects only reflect overt movement and can only involve morphological heads. It is hoped that these mutually supportive ideas will combine to produce a restrictive model of grammar that makes clear predictions about how diverse structures should be treated. If

[13] See Harizanov (2014) for a conceptually related approach to clitic doubling in Bulgarian.

nothing else, the attempt to adapt this model to accommodate different phenomena leads to interesting challenges and particular analyses, some of which have been sketched out in this paper.

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