Expletives Don't Move[1]

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1. Introduction

In this paper I show that expletives do not undergo movement.[2] Thus, I show that the embedded SpecIP in constructions like (1) is never created, *there* being base-generated in its surface position.

(1) There is likely [$_{IP}$ to be someone in the garden].

I examine consequences of this claim for the proper analysis of expletive constructions, locality restrictions on movement, and the Extended Projection Principle (EPP), which I argue should be eliminated from the grammar.

2. *Wager*-class verbs

My central argument that expletives do not move concerns locality restrictions on movement. The first argument concerns *wager*-class verbs. Pesetsky (1992) establishes the descriptive generalization that agentive verbs cannot ECM lexical NPs, as illustrated in (2).

(2) a. *John wagered the woman to know French.
b. *Mary alleged the students to have arrived late.

In Bošković (1997) I deduce Pesetsky's generalization from the proposal that agentive verbs

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[2]More precisely, A-movement. I do not discuss the possibility of A'-movement of expletives.

have an additional VP shell (see Hale and Keyser 1993) and the Minimize Chain Links Principle. I show that as a result of the presence of the additional VP shell, matrix SpecAgroP, the Accusative-checking position, is too far from the embedded clause subject.[3]

(3) *John$_i$ wagered [$_{AgroP}$ the woman$_j$ [$_{VP}$ t$_i$ [$_{VP}$ t$_i$ [$_{IP}$ t$_j$ to t$_j$ know French]]]].

What is important for our current purposes is that (2) involves a locality violation.

Significantly, Postal (1974, 1993) shows that expletives, which following Belleti (1988) and Lasnik (1999b) I assume are Case-marked hence must get to the matrix SpecAgroP in (4), can be ECM-ed by the verbs in question.

(4) a. He alleged there to be stolen documents in the drawer. (Postal 1993)
b. cf.*He alleged stolen documents to be in the drawer. (Postal 1993)
c. He acknowledged it to be impossible to square circles. (Postal 1993)
d. John wagered there to have been a stranger in that haunted house. (Ura 1993)
e. cf. *John wagered a stranger to have been in that haunted house.

Why is it that the locality violation does not arise in the expletive constructions, in contrast to their non-expletive counterparts? The answer I would like to put forward is straightforward, following the general logic of dealing with this type of a situation: there is no locality violation because there is no movement. More precisely, the locality violation does not arise in the expletive constructions because the expletives do not move. They are inserted right into their Case-checking position.

3. The experiencer blocking effect in French

A particularly strong argument that expletives do not move is provided by the experiencer blocking effect in French. It is well-known that English allows raising across an experiencer.

(5) John seems to Mary to be smart.

Some languages, however, do not allow NP raising across an experiencer. French is such a language, as noted in Chomsky (1995:305) and McGinnis (1998, 2001) and shown in (6).[4]

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[3]See Bošković (1997) for details of the analysis. The upshot of the analysis is that equidistance allows skipping of one, but not two Specs, which is what would have to happen with agentive constructions (see Bošković 1997 for discussion of simple transitives). I argue that the agentive shell, which is responsible for the ungrammaticality of (2), is not present in passives, which gives us a straightforward account of the contrast between (2) and (i). (The additional agentive shell is also not present with verbs like *believe*, which can ECM.)

(i) a. The woman was wagered to know French.
b. The students were alleged to have arrived late.

[4]There is apparently some disagreement among French speakers with respect to constructions like (6). (For relevant discussion of (6), see Boeckx 2000b, Chomsky 1995, McGinnis 1998, 2001, and Rouveret and Vergnaud 1980, among others.) I am focusing here on the dialect in which (6)a-b are unacceptable.

(6) a. *Deux soldats semblent au général manquer (être manquants) à la caserne.
two soldiers seem to-the general to-miss to-be missing at the barracks
b. *Deux soldats semblent au général être arrivés en ville.
two soldiers seem to-the general to-be arrived in town

According to Chomsky and McGinnis, (6)a-b violate a locality restriction on movement, more precisely, Relativized Minimality. They involve A-movement across an A-Spec.[5]

Significantly, expletive counterparts of (6) are acceptable, as shown in (7).

(7) a. Il semble au général y avoir deux soldats manquants à la caserne.
there seems to-the general to-have two soldiers missing at the barracks
b. Il semble au général être arrivé deux soldats en ville.
there seems to-the general to-be arrived two soldiers to town

There is an obvious, principled account of the contrast in question. In contrast to (6), (7) do not involve A-movement across an A-Spec. In other words, the expletive is generated in its SS position. As a result, it does not cross the experiencer, hence its presence does not induce a locality violation.[6] The contrast between (6) and (7) (more precisely, the absence of a locality violation in (7)) provides additional, strong evidence that expletives do not move.

4. Causatives in French

Burzio (1986) observes that French *faire*-infinitives do not allow passivization out of them.

(8) a. Marie a fait faire une jupe.
Mary has made to-make a skirt
'Mary had a skirt made.'
b. *Une jupe a été fait(e) faire (par Marie)
a skirt has been made to-make by Mary
'A skirt was caused to be made by Mary.'

While it is not completely clear why (8)b is unacceptable it seems plausible that its ungrammaticality should be attributed to a violation of locality restrictions on movement. Another possibility is to assume that the infinitive in (8) is a CP. (8)b is then ruled out by whatever is responsible for the ban on A-movement out of CPs. Either way, the culprit for the ungrammaticality of (8)b is movement out of the infinitive.

Significantly, Bouvier (2000) observes that the expletive counterpart of (8)b is good.

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[5]See the above references for discussion why English (5) is acceptable.

[6]Notice that not all languages that exhibit the experiencer blocking effect with respect to constructions like (6) are necessarily expected to pattern with French with respect to (7). Ausín and Depiante (2000) investigate the experiencer blocking effect in Spanish, which also disallows constructions like (6). They argue that in Spanish, *seem*+experiencer is a control construction, in particular, it involves subject control. Obviously, a language that treats the *seem*+experiencer construction as a subject control construction is not expected to allow an expletive in this construction for reasons independent of our current concerns.

(9) Il a été fait faire une jupe (?par Marie).
there has been made to-make a skirt by Mary
'A skirt was caused to be made.'

The obvious conclusion is that, in contrast to (8)b, (9) does not involve movement out of the infinitive, which confirms that expletives do not move.

5. Icelandic multiple subject constructions

In this section I consider the Icelandic multiple subject construction, illustrated by (10).

(10) Það kyssti einhver Maríu.
there kissed someone Mary
'Someone kissed Mary.'

Chomsky (1995) proposes an analysis of (10) on which the two subjects occupy Specs of the same head at SS. He then suggests that the construction involves PF reordering, a reflex of the V-2 requirement, which places the verb in the second position. In Bošković (2001a) I restate Chomsky's analysis within a more general approach in which PF is allowed to affect word order, but not through actual PF movement. The approach crucially relies on Franks's (1998) (see also Pesetsky 1998) proposal that a lower copy of a non-trivial chain be pronounced in PF iff this is necessary to avoid a PF violation.[7] Consider how Chomsky's

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[7]One relevant example from Bošković (2000) involves multiple wh-fronting. A number of languages require all wh-phrases to front in questions. Romanian is one such language.

(i) a. Cine ce precede?
who what precedes
'Who precedes what?'
b. *Cine precede ce?

However, the second wh-phrase does not move if it is homophonous with the first fronted wh-phrase.

(ii) a. Ce precede ce?
what precedes what
b. *Ce ce precede?

Following Billings and Rudin's (1996) discussion of Bulgarian, I propose in Bošković (2000) that Romanian has a PF constraint against consecutive homophonous wh-phrases, which rules out (iib). What about (iia)? Given that Romanian has a syntactic requirement that forces all wh-phrases to move overtly, which I argue involves focalization, the second wh-phrase also must move in the syntax. (iia) then has the SS in (iii), ignoring irrelevant copies. If, as usual, the highest copy of the second wh-phrase in (iii) is pronounced, a PF violation obtains. (We end up with a sequence of homophonous wh-phrases.) This is precisely the situation when the pronunciation of a lower copy is allowed under Franks's approach to the pronunciation of non-trivial chains.

(iii) SS: Ce ce precede ce? PF: Ce ~~ce~~ precede ce?

This analysis enables us to account for the contrast between (iia) and (ib) without violating the syntactic requirement that forces wh-phrases to move overtly in Romanian, without look-ahead from the syntax to PF, and without PF movement. There is also independent evidence that the second *ce* in (iia) indeed moves in the

analysis of (10) can be implemented in this system given that V-2 is indeed a PF requirement, as argued in Bošković (2001a), Boeckx (1998), and Rice and Svenonious (1998). (Bošković 2001a argues that the same holds for the clitic second requirement.) Let us assume following Chomsky that the two subjects in (10) are indeed located in the Specs of the same head, to which the verb moves. If we pronounce both subjects in front of the verb we get a PF violation, namely the second position requirement violation. This is precisely the situation where we are allowed to pronounce a lower copy of a non-trivial chain.

(11) Það ~~einhver~~ kyssti einhver Maríu.

Interestingly, it is always the indefinite that is pronounced in a lower position. We never get the pattern in (12) (see (14) below).

(12) indefinite verb það...

Why can *það* never be pronounced in a lower position? Consider the following construction.

(13) Það virðist maður hafa kysst Maríu.
there seems a man have kissed Mary
'A man seems to have kissed Mary.'

Suppose that expletives can move. The following derivation is then available: *Það* is inserted into the embedded SpecIP. Since Icelandic allows multiple subjects, we can still move the indefinite to this position. Both subjects then move to the matrix SpecIP.[8] Assuming that elements in the Specs of the same head are equidistant we can move them in either order. Given that both *það* and the indefinite have copies lower than the verb, a question arises why we cannot delete the higher copy of *það* to satisfy the second position requirement. This deletion would give us the unacceptable constructions in (14).

(14) a. *~~Það~~ maður virðist það ~~maður~~ hafa kysst Maríu.
b. *Maður ~~það~~ virðist það ~~maður~~ hafa kysst Maríu.

On the other hand, if expletives do not move, the problem does not arise. The reason why a lower copy of the expletive cannot be pronounced is trivial: there are no lower copies of the

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syntax. Thus, it can license parasitic gaps (iv), which can only be licensed by overt movement. In this respect, the "*ce*-in-situ" patterns with *what* in (va), rather than *what* in (vb), as expected under the proposed analysis.

(iv) Ce precede ce fără să influenţeze?
what precedes what without subj.particle influence.3p.sg
'What precedes what without influencing?'

(v) a. What did John read without filing?
b. *Who read what without filing?

[8]I ignore the derivation on which the indefinite in the abstract pattern in (12) is located in the matrix SpecCP and the expletive in the matrix SpecIP, since it is well-known that *það* is incompatible with clause-mate topicalization. For an account of this fact that does not extend to the derivations considered with respect to (14) (i.e. it has nothing to say about their ungrammaticality), see Jónsson (1996:49-50).

expletive. The only way to save the construction in question from a PF violation is then to pronounce a lower copy of the indefinite (see Bošković 2001a for discussion where this copy is located), which gives us the order expletive V indefinite. I conclude therefore that given plausible theoretical assumptions, the Icelandic construction under consideration provides further evidence that expletives do not move.

6. The Merge-over-Move Preference

Consider the data in (15).

(15) a. There seems to be a man in the garden.
b. *There seems a man$_i$ to be t$_i$ in the garden.

Chomsky (1995) gives an account of (15) based on the Merge-over-Move preference. According to Chomsky, at the point when the embedded clause is built we need to insert something into the infinitival SpecIP to satisfy the EPP. We have two possibilities for doing this: either insert *there*, which is present in the numeration, or move the indefinite. Chomsky argues that lexical insertion is a simpler operation than movement. The possibility of expletive insertion into the embedded SpecIP then blocks the indefinite movement, which takes place in (15)b. Castillo et al (1999) and Epstein and Seely (1999), however, observe several problems with the Merge-over-Move account. Consider first (16), taken from Castillo et al (1999) and attributed to Juan Romero and Alec Marantz, where the indefinite has apparently moved to SpecIP although an expletive was available for lexical insertion.

(16) There was a rumor that a man$_i$ was t$_i$ in the room.

To deal with this type of construction Chomsky (2000) introduces the concept of subnumeration, defined on phases. More precisely, Chomsky proposes that each phase has its own subnumeration. Since the expletive is not present in the subnumeration corresponding to the embedded clause, the option of expletive insertion is not available.

A serious problem for this analysis is raised by (17).

(17) a. There has been a book$_i$ put t$_i$ on the table.
b. *There has been put a book on the table.

Lasnik (1999b) argues that the indefinite in (17)a moves overtly to satisfy the EPP.[9] Under Chomsky's definition of phase, (17)a-b contain only one phase (passive VP is not a phase for Chomsky). As a result, *there* should be available for insertion at the point when *a book* undergoes movement in (17)a. Given the Merge-over-Move preference, the possibility of expletive insertion should block the indefinite movement. (17)b should then block (17)a.

Consider now (18).

[9]Under the partitive Case hypothesis, the indefinite can be located in its Case-checking position.

(18) Mary believes John$_i$ to t$_i$ know French.

When the embedded clause is built in (18) there are two possibilities for satisfying the EPP. We can either move *John* or Merge *Mary* into that position. Given the Merge-over-Move preference, the latter should block the former. As a result, we cannot derive (18). Chomsky (1995) observes that the derivation on which *Mary* is introduced into the embedded SpecIP eventually violates the Θ-Criterion. However, this way of ruling out the derivation in question requires look-ahead. To avoid look-ahead, Chomsky (2000) proposes the condition that arguments can be merged only in θ-positions. The condition blocks the unwanted derivation for (18) without look-ahead. However, Epstein and Seely (1999) point out several problems with this condition. For one thing, the condition is massively redundant. Thus, the condition unnecessarily rules out (19), which is plausibly already ruled out because it is uninterpretable (i.e. because the presence of *John* induces a Full Interpretation violation.)

(19) *John seems that Peter likes Mary.

Based on these problems, Epstein and Seely (1999) and Castillo et al (1999) argue that the Merge-over Move preference and the Merge-over-Move account of (15)b should be abandoned. How can then (15)b be accounted for? There is a straightforward answer provided by the discussion so far: there are no intermediate A-positions in expletive constructions at all, as argued above. (15)b is then ruled out by the Last Resort Condition because there is no reason for the indefinite to move to the embedded SpecIP. This leads us to another conclusion. Given that lexical insertion is subject to the Last Resort Condition (Chomsky 2000:132-133 and Hornstein 2001:55-56),[10] it must be the case that the expletive in (15)a does not move. The expletive cannot be inserted into the embedded SpecIP for the same reason the indefinite cannot move to this position in (15)b. The usual trouble maker (20) also follows since there is no reason to insert the expletive into the embedded SpecIP.

(20) *There seems there to be someone in the garden.

7. Effect on output

Consider (21).

(21) a. There seems to be someone in the garden.
b. Someone seems to be in the garden.

Chomsky (1995), who treats the EPP in terms of strong feature checking, argues that an element can be present in a numeration only if it has an effect on the output. In the case of strength, the effect is reflected in PF, namely in causing displacement: strength can be present in the numeration only if it induces a PF observable movement.[11] As a result, as observed by Nunes (1995), the infinitival I in (21) cannot have a strong feature because the

[10]On this view, satisfying a selectional requirement counts as a driving force for Last Resort.

[11]See also Chomsky (2000:109) concerning the filled Spec requirement view of the EPP. The argument given below can thus be extended to this view of the EPP.

feature would not have an effect on PF. In other words, the EPP cannot hold of this I. Given that lexical insertion is subject to Last Resort, the expletive then cannot be inserted into the embedded SpecIP in (21)a. (There is no reason to insert it there, hence the insertion is blocked by Last Resort.) In other words, the expletive must be generated in its SS position. Based on the arguments presented above I conclude that expletives do not move.

8. Consequences of the immobility of expletives

The conclusion that expletives do not move has a number of important consequences. First, given the conclusion, Moro (1997)-style and Sabel (2000)-style analyses of expletive constructions, where expletives are introduced into the structure lower than SpecIP and then move to SpecIP, cannot be maintained.[12] We also have here evidence against the EPP. Given that expletives do not move, intermediate SpecIPs cannot exist in expletive constructions, which provides us with a straightforward argument against the EPP.[13]

9. More on the EPP

An obvious question to raise now is whether we need the EPP at all. Recently, a number of works have appeared which argue that the EPP can be, and should be, eliminated. The reader is referred to Boeckx (2000a), Bošković (2001c), Castillo et al (1999), Epstein and Seely (1999), Grohmann et al (2000), and Martin (1999). (The predecessors of this line of research are Borer 1986 and Fukui and Speas 1986.) In what follows I reconsider the status of the EPP, eventually agreeing with these authors that the EPP should be eliminated. I will separate arguments for the EPP into two groups: final EPP, which concerns the final landing site of A-movement, and intermediate EPP, which concerns intermediate SpecIPs, i.e. SpecIPs that are on the way of A-movement. I will use the term "EPP" (with " ") pretheoretically without presupposing that the EPP actually exists as an independent condition. In other words, I use the term to refer to filling SpecIP overtly, regardless of what is responsible for it--real EPP (the EPP without " ") or something else.

9.1. "Final EPP" effects

It appears that we do not need the EPP to capture "final EPP" effects, which follow from θ- and/or Case theory (i.e. what I referred to as the Inverse Case Filter in Bošković 1997), as already noted in Fukui and Speas (1986).[14] Thus, (22) and (23) can be ruled out by appealing to the EPP. However, they can also be readily ruled out by the Θ-Criterion (the subject θ-role is not assigned in (22)) and the Inverse Case Filter, i.e. the requirement that traditional Case-

[12]Both Moro's analysis and Sabel's analysis crucially involve expletive movement. For Moro, the expletive undergoes predicate raising to SpecIP. Sabel, on the other hand, generates the expletive as a constituent with its associate, and then moves it to SpecIP. (Admittedly, not all the arguments for the immobility of expletives given above are relevant to Moro's and Sabel's analyses, some of them being tied to Chomsky's view of expletives as being inserted into SpecIP.)

[13]The arguments given in sections 6 and 7 extend to non-expletive constructions (see also fn. 28).

[14]Due to space limitations I ignore an argument for the EPP based on BELIEVE-class verbs from Bošković (1997) and an argument for the EPP based on object shift with ECM from Lasnik (1999a). For discussion of these, see Bošković (2001c) and references therein, where the arguments are explained away.

assigners assign their Case-feature (Tense and nominative in both (22) and (23)), which in the checking theory can be interpreted as a feature-checking requirement.[15] (24) is also ruled out by the Inverse Case Filter under the Null Case approach to the distribution of PRO, on which the subject position of control infinitivals is a Case position.[16]

(22) *[$_{IP}$ [$_{VP}$ Kissed John]].
(23) *Is likely that Mary will leave.
(24) *John tried to seem that Mary likes Peter.

Consider now (25).

(25) a. *Was told Mary that Peter left.
b. *John believes to have been told Mary that Peter left.

(25)a-b can be ruled out by the Inverse Case Filter if both Nominative and Accusative must be checked overtly (not through Agree or Move F). This is in fact what the authors arguing for eliminating the EPP assume. It follows that English has overt object shift (i.e. overt movement of accusative NPs to their Case-checking position outside of the VP), a position independently argued for by a number of authors (Authier 1991, Bošković 1997, 2001b, Johnson 1991, Koizumi 1995, Lasnik 1999b, McCloskey 2000, Runner 1998, Ura 1993.)[17]

9.2. "Intermediate EPP" effects

[15]I assume that, as often suggested, quirky subjects have a structural Case that is not morphologically realized on top of the inherent case. The Case is checked against the nominative Case feature of T in (i).

(i) Okkur var hjálpað. (Icelandic)
us.dat was helped
'We were helped.'

[16]See Bošković (1997), Chomsky and Lasnik (1993), and Martin (1996, 2001). If the infinitival SpecIP is filled by PRO neither the EPP nor the Inverse Case Filter is violated in (24). However, on this derivation (24) is ruled out by whatever is responsible for the well-known ban on expletive PRO.

[17]Epstein and Seely (1999) and Boeckx (2000a) propose accounts of why Case features cannot be checked by Agree or Move F. Thus, assuming that features can be checked (i.e. probed) only under c-command, Epstein and Seely observe that when elements Y and Z have to check against each other an uninterpretable feature X (i.e. a feature that is uninterpretable on both Z and Y, which is the case with Case-features), X can be checked on both Y and Z only if the two at some point undergo Spec-Head agreement. Given that covert checking involves Agree (or Move F for that matter), it follows that Case checking must be done overtly. While a traditional Case assigner c-commands the traditional Case asignee and therefore can "probe" it without category movement of the Case assignee to the Spec of the Case assigner, the traditional Case assignee does not c-command the Case assigner and hence cannot probe it without this movement. A Spec-Head configuration thus needs to be established so that the Case assignee can c-command and probe the Case assigner. As discussed above, expletive *there* is involved in Case-checking upon merger in SpecIP. Since upon merger, a projection of I, whose Case feature *there* checks, c-commands *there*, I assume that I can probe *there*. Notice that I will remain silent in this paper on Φ-features licensing. I assume that if it is done through feature checking it is done through Agree (or LF Move F), hence does not induce overt movement, which is what I am concerned with in this paper. (Φ-features licensing clearly does not require a Spec-Head configuration, as can be seen in expletive constructions like *There are some women in the garden*.)

It seems that we do not need the EPP to capture "final EPP" effects. Let us now consider "intermediate EPP". We have already seen that expletive constructions do not show "intermediate EPP" effects, i.e. in such constructions intermediate SpecIPs are not created. What about non-expletive constructions? Interestingly, there is evidence of "EPP" effects in such constructions. Thus, under Sportiche's (1988) account of quantifier (Q) float, on which the element a floating Q modifies is generated as a constituent with the Q, the Q subsequently being stranded under the movement of the element in question, (26) provides evidence that *the students* passes through the infinitival SpecIP when moving from its θ-position, SpecVP, to the matrix SpecIP.[18] Furthermore, since the embedded SpecIP is not a Case position, movement to this position cannot be motivated by the Inverse Case Filter.

(26) The students$_i$ seem [all t_i] to know French.

More evidence for "intermediate EPP" is provided by the constructions in (27), taken from Castillo et al (1999), who attribute the data to Danny Fox.

(27) a. Mary seems to John [$_{IP}$ to appear to herself to be in the room].
b. *Mary seems to John [$_{IP}$ to appear to himself to be in the room].

While in (27)a the anaphor in the embedded clause can take the matrix clause NP as its antecedent, in (27)b this is not possible. Why is the anaphor in (27)b unable to take the experiencer as its antecedent? Notice that there is evidence that the experiencer NP c-commands outside of the experiencer PP so that we cannot attribute the ungrammaticality of (27)b to the failure of the potential antecedent to c-command the anaphor. (28)a shows that the experiencer NP induces a Condition C violation, and (28)b-c show that it can license a negative polarity item and an anaphor in a position outside of the experiencer.

(28) a. *It seems to him$_i$ that John$_i$ is in the room.
b. Pictures of any linguist seem to no psychologist to be pretty.
c. Pictures of himself seem to John to be cheap.

The ungrammaticality of (27)b can be easily accommodated if the matrix subject passes, in fact must pass, through the embedded clause SpecIP on its way to the matrix SpecIP. (27)b then exhibits a Specified Subject Condition effect. The experiencer is attempting to bind the anaphor across a closer binder, namely the trace in SpecIP (see (29)b). The problem does not arise in (27)a, where the anaphor is bound by the closest subject (see (29)a).

(29) a. Mary$_i$ seems to John [$_{IP}$ t_i to appear to herself$_i$ to be in the room].
b. *Mary$_j$ seems to John$_i$ [$_{IP}$ t_j to appear to himself$_i$ to be in the room].

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[18]See McCloskey (2000) for strong evidence for Sportiche's approach. It is often noted that the ungrammaticality of passive and ergative constructions in (i) provides evidence against Sportiche's analysis. However, in Bošković (2001b) I provide an account of (i) that is fully compatible with Sportiche's analysis.

(i) a. *The students arrived all.
b. *The students were arrested all.

Consider now the following data involving reconstruction from Lebeaux (1991).

(30) a. *His_i mother's$_j$ bread seems to her_j to be known by every man_i to be the best there is.
b. His_i mother's$_j$ bread seems to every man_i to be known by her_j to be the best there is.

The data in question can be easily accounted for if the matrix clause subject passes through embedded SpecIPs which can then serve as reconstruction sites.[19] In (30)a, the matrix clause subject has to be reconstructed into the most embedded clause in order to license the bound variable reading. However, the construction is then ruled out as a Condition C violation. (Notice that the construction is acceptable if *her* and *his mother* are not co-referential, which indicates that the quantifier can bind a variable outside of the *by*-phrase.) On the other hand, in (30)b we can reconstruct the matrix subject to the higher infinitival SpecIP, a position where the bound variable reading can be licensed without inducing a Condition C violation.

I conclude therefore that in non-expletive constructions the "intermediate EPP" holds. The Inverse Case Filter cannot help us in this case, as it did in the case of the "final EPP", since we are not dealing with Case-licensing positions. The EPP cannot do the job either, since the EPP cannot account for the contrast between expletive and non-expletive constructions with respect to filling the intermediate SpecIP, illustrated in (31). (Recall that arguments given in sections 6-7 raise problems for the EPP even with respect to non-expletive constructions, i.e. (31)a. See also fn. 28 for another argument against the EPP.) In the next section I provide a non-EPP account of (31)a.

(31) a. $Someone_i$ seems [$_{IP}$ t_i to be t_i in the garden].
b. There seems [$_{IP}$ to be someone in the garden].

10. Successive cyclicity

It is standardly assumed that the wh-phrase in (32) passes (more precisely, must pass) through the intermediate SpecCP as a result of successive cyclic movement.

(32) $What_i$ do you think [t_i that Mary bought t_i]?

Note that there is no requirement that the Spec of the CP headed by *that* be filled, as shown by the grammaticality of (33), where the Spec of the embedded CP remains empty.

(33) You think [that Mary bought a car].

Apparently, *what* must pass through the embedded SpecCP in (32) for a reason independent of any property of *that*, which does not require a Spec. In other words, movement to the embedded SpecCP in (32) is a reflex of successive cyclic movement. It is required by a

[19]I use the term reconstruction informally to refer to interpretation of intermediate positions in non-trivial chains. The process in question can involve either activation of lower copies of chains in LF or an on-line application of relevant conditions at the point when the intermediate positions are actually heads of chains.

property of this movement, not by a property of *that*. I would like to suggest that the same holds for the movement of *the students* to the embedded SpecIP in (34).

(34) The students$_i$ seem [t_i to have t_i liked French].

More precisely, just like *what*, which is moving to SpecCP, passes through the embedded SpecCP as a result of successive cyclic movement (not a property of C), *the students*, which is moving to SpecIP, passes through the embedded SpecIP as a result of successive cyclic movement, not a property of I, which, like *that*, itself does not require a Spec. The proposal is then that (32) and (34) should be treated in the same way in the relevant respect. In particular, the successive cyclic movement treatment of (32) should be extended to (34). This proposal does not affect expletive constructions given that expletives do not have to be inserted below SpecIP (contra Moro and Sabel). The contrast between expletive and non-expletive constructions illustrated in (31) is thus accounted for. Under the successive cyclic movement analysis, intermediate SpecIPs have to be filled only in non-expletive constructions, as desired. The contrast between (31)a and (31)b with respect to filling the intermediate SpecIP is accounted for in the same way as the contrast between (32) and (33) with respect to filling the intermediate SpecCP.

Let us see what the current proposal would imply when plugged into recent accounts of these constructions.Chomsky (2000) follows standard assumptions in making a distinction between (32) and (34) in the relevant respect. He assumes that I always requires a filled Spec. In other words, it is subject to the EPP.[20] As for *that*, he assumes that *that* may, but does not have to, have the EPP property (i.e. require a Spec).[21] (33) instantiates the no EPP property option. As for (32), although in principle *that* does not have to have the EPP property, according to Chomsky the no EPP option for *that* is ruled out in (32) by the Phase-Impenetrability Condition (PIC), which says that only the head and the Spec of a phase are accessible for movement outside of the phase. Since for Chomsky CP is a phase *what* in (32) must be moved to the embedded SpecCP; otherwise it could not be moved outside of the CP. This is accomplished by giving *that* the EPP option. If *that* is not given the EPP option, *what* would not move to the embedded SpecCP. As a result, it could not move outside of the embedded CP due to the PIC. Technically, it would be easy to extend Chomsky's account of (32) to (34). We would just need to assume that I may, but does not have to, have the EPP property and that IP is a phase.[22] Chomsky argues that IP is not a phase. Interestingly, the

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[20]Chomsky (2000) restates the EPP as a filled Spec requirement. Note that the EPP still must involve some kind of feature-checking/matching, as in Chomsky (1995), given that it is not the case that anything can satisfy it, as (i) shows. This is actually implied in Chomsky's (1999, 2000) system, where Agree is a component of the composite operation Move and the EPP is considered to be some kind of a selectional feature.

(i) *[$_{IP}$ [Because Mary had left] [$_{I'}$ arrived someone]]

[21]I will refer to heads that always require a Spec, which is not the case with *that*, as true EPP heads. As discussed below, this paper is concerned with eliminating the true EPP, which holds independently of successive cyclic movement.

[22]One possibility is to assume that each phrase is a phase (a bounding node in pre-minimalist terms), which seems to be the null hypothesis, essentially importing Manzini's (1994) proposal that movement must proceed through the domain of each head into a phase-based system. Under this analysis each head would have to be assigned an EPP property when movement takes place out of its maximal projection from its complement.

criterion for phasehood he adopts would classify the embedded IP in (34) (in fact all raising IPs) as a phase. The central criterion for phasehood of clauses is propositionality. The embedded clause in (34) seems to be a complete proposition and should therefore count as a phase.[23] We could also relativize the notion of phasehood for locality of movement following the line of research originating with Rizzi (1990), who shows that in a number of respects, relativized barrierhood is superior to rigid barrierhood. (Chomsky's conception of phase-based locality corresponds to rigid barrierhood.) In particular, one could easily develop a relativized phase system where a CP would be a phase for elements undergoing movement to CP, and IP for elements undergoing movement to IP. The PIC would then again force movement through the infinitival SpecIP in (34). The upshot of this discussion is that the proposal concerning the "intermediate EPP" made here can be implemented in Chomsky's (2000) system. In fact, the implementation would not face any of the problems for the true intermediate EPP noted above. However, I hesitate to endorse this analysis because Chomsky's (2000) approach to successive cyclic movement seems to me to be on the wrong track. The problem with the approach is that it relates successive cyclic movement of *what* in (32) to a property of *that*. As a result, it is difficult in his system to rule out (35), given the derivation on which we have chosen the EPP option for *that*, which results in movement of *what* to the embedded SpecCP, just as in (32) (see (42) below for another problem).[24]

(35) *Who thinks what that Mary bought?

The most principled way of accounting for (35) seems to be to divorce movement to intermediate SpecCPs from C, i.e not to consider it to be a result of a property of C, but the movement itself. This was actually the standard assumption until very recently. E.g., this was the case with Takahashi's (1994) system, the most comprehensive account of locality of movement in early minimalism, based on Chomsky and Lasnik's (1993) Minimize Chain Links Principle (MCLP).[25] For Takahashi, successive cyclic movement is not a result of feature checking. Rather, it is a result of the requirement that all chain links be as short as possible.[26] The requirement forces element X undergoing movement of type Y to stop at

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[23]Compare also the infinitive in *There seemed to have arrived someone* with the embedded finite clause in *It seemed there had arrived someone* or *It seemed someone had arrived*. The finite clause seems to be no more of a proposition than the infinitive. Chomsky gives two empirical arguments that IPs are not phases. First, he claims that, in contrast to CPs, IPs are not phonologically isolable, which is supposed to follow from them not being phases. Second, the assumption that IPs are not phases is supposed to provide us with an account of the fact that partial raising of the associate in expletive constructions is generally not possible, as shown by **there seems a man to have arrived*. The latter property was discussed in section 6, where it was shown that Chomsky's account of that property does not work. As for the former, the claim that IPs are not isolable cannot be maintained. Thus, IPs can undergo right node raising, as shown by *She wonders when, and he wonders why, Bill left*. For problems with Chomsky's approach to phases, see also Epstein and Seely (1999).

[24]We cannot appeal to the Doubly Filled Comp Filter, since nothing changes if *that* is replaced by a null C. See, however, the discussion below for a way of handling (35) hinted at in Chomsky (2000).

[25]Takahashi's approach is revived in Boeckx (2001), who provides convincing new arguments for it.

[26]Takahashi assumes Form Chain. Under this approach Last Resort is relevant to the formation of a chain, not links of a chain. In other words, formation of a chain must have a feature-checking motivation, not formation of chain links. Notice also that since Form Chain is a single operation, formation of a chain cannot be interleaved with another operation (see also Collins 1994). Thus, in the structure X_i Y t_i t_i, with X_i t_i t_i a three-member chain and Y the target of movement, no movement of X takes place until Y enters the structure.

every position of type Y on the way to its final landing site independently of feature checking. The MCLP thus forces *what* in (32) to pass through the embedded SpecCP on its way to the matrix SpecCP. It also forces *the students* in (34) to pass through the embedded SpecIP on its way to the matrix SpecIP. The intermediate SpecCP and SpecIP in the constructions in question are filled as a result of the property of the movements involved. We do not need to invoke a property of the embedded C and I to drive the movement to these positions. Notice also that since no feature checking is posited between a wh-phrase and declarative C, both (35) and (33) are easily accounted for.

It is worth noting in this respect the following construction from Sportiche (1988).

(36) The carpets (all) will (all) have (all) been (all) being (all) dusted for two hours.

Under Sportiche's account of Q-float we are led to the conclusion that *the carpets* in (36) passes through all the positions in which *all* can be placed. It is unlikely that all the positions involve feature-checking/EPP property. On the other hand, Takahashi's analysis can be easily extended to (36). What is important for our purposes is that under Takahashi's analysis we can force A-movement to proceed via intermediate SpecIPs independently of the EPP. As a result, we can account for "intermediate EPP" effects without appealing to the EPP.

There is a suggestion in Chomsky (2000:109), more fully worked out in Chomsky (1999:29), which has the effect of making movement to the Spec of a phase head that does not obligatorily have the EPP property (non-true EPP head) essentially independent in terms of the driving force from the phase head itself even in a phase-based locality system. The suggestion is to make the assignment of an EPP property to non-true EPP heads conditioned on it being required to permit successive cyclic movement (see Chomsky 1999:29 for another possibility). The embedded clause heads in (32) and (34) can then be assigned an EPP feature (given the above suggestion to extend phasehood to the infinitive in (34)), since the assignment is necessary to permit successive cyclic movement (see, however, (40)-(42)). On the other hand, the embedded clause heads in (33), (35), and (31)b cannot be assigned an EPP feature since the assignment is not necessary to permit successive cyclic movement. Under this analysis, movement through the Spec of a non-true EPP phase head is really a reflex of successive cyclic movement. The phase head is essentially a bystander. By itself, it cannot induce movement to its Spec, hence the ungrammaticality of (35). In other words, we are not dealing here with true intermediate EPP, which this work is arguing against.

There are other ways of instantiating the idea that movement to the embedded clause Spec in (32) and (34) takes place because of locality, not because the embedded clause head requires a Spec. Thus, we can implement the idea by appealing to the old notion of a phrase boundary breaking a chain (Aoun 1986), now relativized in such a way that CP breaks an A'-chain, and IP an A-chain, which is relatable to the final landing sites of the movements.

(37) The Successive Chain Links Condition
* A_i [$_\alpha$ A_j], where α dominates A_j and excludes A_i, A_i and A_j successive links of a chain β and α=CP if A_i is in an A'-position, α=IP if A_i is in an A-position.

Given (37), A'-movement is not allowed to cross a CP boundary, and A-movement is not allowed to cross an IP boundary. A way around the blocking effect of the CP and IP is through adjunction to the CP/IP. Under Kayne's (1994) proposal that traditional specifiers are actually adjuncts, this is tantamount to movement through SpecCP and SpecIP. (37) thus forces movement through SpecCP and SpecIP for A'- and A-movements respectively. It gives us "intermediate EPP" effects for A-movement without employing true EPP.[27]

Yet another possibility is to appeal to Manzini's (1994) approach to locality, which requires movement to pass through the domain of each head. A relativized minimality version of Manzini's proposal would require movement to pass through the domain of each head of an appropriate type, A'-heads for A'-movement and A-heads for A-movement. A consequence of this is that A'-movement would have to pass through the domain of C and A-movement through the domain of I. Both movement through SpecCP and movement through SpecIP (in the case of A-movement) are then forced by locality.

None of the conditions on movement/chain formation approaches is faced with the problem that (35) raises for the approach that ties successive cyclicity to a property of intermediate heads. There is additional evidence for the superiority of the former approaches. (See also Boeckx 2001. I will take Takahashi 1994 as the representative of these approaches.)

Lobeck (1990) and Saito and Murasugi (1990) note that functional heads can license ellipsis of their complement only when they undergo Spec-Head agreement (SHA). (38)a,b,d show that tensed I, *'s*, and +*wh*-C, which according to Fukui and Speas (1986) undergo SHA, license ellipsis, whereas the non-agreeing functional heads *the* and *that* do not.

(38) a. John liked Mary and [$_{IP}$ Peter [$_{I'}$ did e too]].
b. John's talk about the economy was interesting but [$_{DP}$ Bill [$_{D'}$'s e] was boring.
c. *A single student came to the class because [$_{DP}$[$_{D'}$ the e] thought it was important.
d. John met someone but I don't know [$_{CP}$ who [$_{C'}$ +wh-C e].
e. *John thinks that Peter met someone but I don't believe [$_{CP}$[$_{C'}$ that e].

In Chomsky's (2000) system the SHA requirement on ellipsis would be restated as an EPP requirement: only heads that take a Spec can license the ellipsis of their complement.

Martin (1996) (see also Bošković 1997 and Koizumi 1995) observes that VP ellipsis is possible in control infinitivals, which is expected under the Case-theoretic approach to the distribution of PRO, on which PRO in (39) is checked for null Case by the infinitival I, *to*, hence must undergo SHA with it (in other words, this *to* has a Spec). Significantly, VP ellipsis is not possible in ECM infinitives, as shown in (40).

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[27]A version of this analysis that would not require an appeal to the notion of chain would make the step of crossing CP in the case of A'-movement and IP in the case of A-movement in itself illegitimate, requiring adjunction to CP/ IP (i.e. movement to SpecCP and SpecIP under Kayne's proposal). In its spirit, this analysis would be close to *Barriers*, with "relativized barriers" CP and IP being voided through adjunction.

(39) John was not sure he could leave, but he tried PRO to.
(40) *John believed Mary to know French but Peter believed Jane to.

Epstein and Seely (1999) interpret this as indicating that, in contrast to *to* in (39), *to* in (40) does not undergo SHA. In Chomsky's (2000) terms, it does not take a Spec. Recall now that the infinitival subject in (40) undergoes overt object shift, passing through the infinitival SpecIP on its way to its Case position in the matrix clause. The possibility of Q-float in (41) indicates that the ECM subject is indeed passing through the infinitival SpecIP.

(41) I believe the students all to know French.

We thus have here evidence against the approach to successive cyclicity that ties movement through a non-Case infinitival SpecIP to a property of I, either through feature-checking (i.e. SHA) or by endowing the I with a Spec requirement.[28] Under Takahashi's approach, *John* passes through SpecIP in (40). However, the movement is forced by the MCLP, not a feature-checking/filled Spec requirement. As a result, no SHA with *to* takes place in (40) in spite of *John* passing through the embedded SpecIP.

The same type of argument can be constructed with respect to (42), taken from Bošković (1997).

(42) *John met someone but I don't know who Peter said t C.

The fact that IP ellipsis is not licensed in (42) can be readily accounted for if passing through SpecCP does not imply SHA with the C. The ungrammaticality of (42) thus provides further evidence against the feature-checking/EPP property view of successive cyclic movement, on which C would undergo SHA/have the EPP property in (42). Under this view, (42) is incorrectly expected to pattern with (38)d rather than (38)e.

The old problem of the impossibility of intermediate preposition (P) stranding provides further evidence for the superiority of Takahashi's approach. Consider (43)-(44).

(43) a. In which garage did you find that car?
b. Which garage did you find that car in?
(44) *Which garage do you think in (that) John found that car?

Although pied-piping of the P is in principle optional in the construction under consideration it cannot take place in an intermediate position, as shown in (44). Under Chomsky's (2000) approach to successive cyclicity, which ties successive cyclic movement to a property of intermediate heads and considers each step of successive cyclic movement a separate operation, it is very difficult to account for (44), more precisely, the contrast between (43)b

[28]We also have here additional evidence against the intermediate EPP (more precisely, against both Chomsky's 1995 feature checking view of the EPP and Chomsky's 2000 filled Spec view of the EPP).

and (44). It seems that (44) is incorrectly ruled in.[29] On the other hand, accounting for these facts under Takahashi's approach is straightforward, given that, as discussed above, the embedded clause C does not establish a SHA relation with a wh-phrase. In (43), wh-movement takes place after the matrix C, which drives the movement, enters the structure (see fn. 26). The chain starting in the original position of the wh-elements (PP in (43)a and NP in (43)b) and finishing in the matrix SpecCP is then formed, formation of the chain being driven by a formal inadequacy of the matrix C, i.e. checking its strong +wh-feature, thus conforming with Last Resort. The MCLP forces the movement to proceed via the intermediate SpecCP, but no feature-checking needs to take place in this position. In contrast to (43), (44) does not involve single chain formation. Rather, we are dealing with two separate chains: one chain involves movement of a PP to the embedded SpecCP, and the other chain involves movement of the wh-phrase from inside the PP to the matrix SpecCP.[30] Given my contention that no SHA with the embedded C takes place in the constructions under consideration (C does not require movement of a wh-element to SpecCP), formation of the first chain violates Last Resort. The contrast between (43)b and (44) is thus accounted for. The impossibility of intermediate P-stranding provides further evidence that successive cyclic movement is not driven by a requirement on intermediate heads.

The details of the analysis are not essential here. Working them out would entail giving a complete account of successive cyclicity and locality of movement, notorious issues which go well beyond the scope of this paper. What is important for our purposes is the proposal that movement through intermediate SpecIPs should be treated on a par with movement through intermediate SpecCPs. The best way of dealing with the latter is to consider it a reflex of successive cyclic movement, more precisely, a result of the property of the movement itself rather than a property of the C head, which clearly independently does not require a Spec. The suggestion is to treat movement through intermediate SpecIPs in the same way, which means that intermediate Is themselves do not require a Spec. This way, we can capture "intermediate EPP" effects without the EPP. The successive cyclic movement approach to "intermediate EPP" effects is empirically superior to the EPP approach (i.e. the approach on which intermediate SpecIPs are filled as a result of the requirement that every sentence have a subject). We have seen that in some contexts (more precisely, expletive constructions) intermediate SpecIPs remain empty, which raises an insurmountable problem for the EPP approach. Furthermore, we have seen that exactly in these contexts intermediate SpecIPs do not have to be filled as a result of successive cyclic movement.

11. Conclusion

The main conclusion of this paper is that expletives do not move. This means that analyses of expletive constructions that crucially rely on expletive movement such as Moro's (1997) predicate raising and Sabel's (2000) stranding analysis cannot be maintained. I have also

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[29]Notice that movement out of SpecCP is in principle possible, yielding at worst a very weak violation. In this respect, notice the contrast between ?*Who do you wonder which picture of Jane bought* and (44), both of which involve extraction of a complement of P from SpecCP.

[30]Form Chain being a single operation, we cannot drop the P, thus changing the categorial status of the element undergoing movement, without breaking chain formation.

argued that the EPP should be eliminated. In some constructions the EPP does not hold at all. Where it does appear to hold its effects follow from independent mechanisms, namely Case Theory and Locality. "Final EPP" follows from Case Theory, which leads to the conclusion that English has overt object shift.[31] "Intermediate EPP" is selective. Intermediate SpecIPs are filled as a result of successive cyclic movement (i.e. locality); otherwise they remain empty, which is unexpected if the EPP were to hold. In particular, intermediate SpecIPs are not created in constructions involving expletive subjects, which do not move.

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[31] At least in ECM constructions. See Bošković (2001c) for relevant discussion of simple transitives.

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