No More EPP

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1. Introduction

This paper sketches an eliminative approach to understanding the so-called "Extended Projection Principle" (EPP). The following main points are defended: (i) there exist redundancies between "EPP-features" and other, independently required mechanisms (such as those for expressing the properties of Case and Agreement systems, for example); (ii) appeal to EPP-features in analytical practice is currently (if not ultimately) uninformative given their ill-understood nature; and (iii) the best way to understand EPP-features is to avoid analyses which rely on them, thus offering the potential for focusing attention to phenomena for which their postulation is truly necessary. To elaborate on the second point, typical analyses of phenomena for which the EPP is evoked usually turn out to be a matter of trading in one mystery (e.g. motivation for certain instances of movement, insertion of expletives, etc.) for another (e.g. the EPP). The strategy that we recommend here has the virtue of attempting to remove the mystery for those cases where it can be, and furthermore offers the possibility—mentioned in (iii)—of isolating those cases for which the postulation of EPP-features is truly unavoidable, thus forming a clearer empirical base on which to concentrate future research. After establishing a little bit of background, we provide some mechanisms and analyses which avoid EPP-features for some cases where they have been deployed in the past; we finish with a summary and some suggested directions for further study.

2. Background

With the move from Government & Binding (GB) approaches to the first steps of research within the Minimalist Program (MP), the EPP went from being a principle proper—which explicitly stated a universal requirement for clausal subjects—to being an entity in the ontology of features, the effect of which insists on the mandatory presence of subjects. One version of this appears in Chomsky (1995), where the EPP is implemented as a universally present D-feature on T, divorcing the EPP from notions of structural Case and/or agreement.

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More recently, Chomsky (1998) suggests expanding the role of EPP-features to implicate them in a range of other mysteries beyond the necessity of 'subjects' (like the apparent need for "very" successive cyclic A-bar movement operations). The EPP is non-explanatory and therefore suspect. Anywhere that it can be dispensed with, it should be. Anywhere that it cannot be dispensed with requires further study since attributing anything to the EPP is vacuous. Phenomena that cannot be explained away with other, independently required or better understood mechanisms—i.e. phenomena that seem to require the postulation of the EPP—need to be recognized for what they are: unsolved problems.

3. Removing the EPP

Perhaps the most interesting novelty within the MP is the idea that computational system of human language (C_{HL}) is an optimal or economic system. This somewhat obscure neighborhood of intuitions has manifested in several ways, including derivational economy arguments.

One standard case is the familiar pair of examples in (1):

(1) a. There seems to be a man in the room.
b. *There seems a man to be in the room.

These derivations share identical lexical resources and represent two alternative possible outputs, corresponding to structures like those in (2); derivationally these examples diverge at the point illustrated in (3):

(2) a. [$_{TP}$ there [seems [~~there~~ [to be [$_{SC}$ [a man] [in the room]]]]]]
b. [$_{TP}$ there [seems [[a man] [to be [$_{SC}$ ~~[a man]~~ [in the room]]]]]]

(3) [to be [[a man] [in the room]]]

One kind of economy of derivation argument, the Merge over Move preference (MOM), presupposes that Move is not an elementary operation but rather a label for a conspiracy of sub-operations (such as Copy + Merge (+ Delete) (+ Form Chain); or Merge + Agree + Determine P(F)). If C_{HL} prefers to do 'less', the MOM preference follows. Of interest is whether the point in (3) presents a choice or not. Under the assumption that non-finite T hosts an illegible EPP-feature, this feature must be eliminated immediately. The putative presence of this feature makes two possible options available: (i) merge of *there*, or (ii) movement of *a man*. MOM chooses (i), blocking the otherwise licit derivation corresponding to the output in (1b/2b).

On the other hand, if EPP-features do not exist, the derivational stage represented in (3) does not present a choice. The derivation may continue by selecting and merging *seem*, which selects non-finite T, but nothing else can merge to T, since it would host no feature that requires checking. In this case, the derivation would proceed as in (4):

(4) a. [to be [[a man] [in the room]]]
b. [seem [to be [[a man] [in the room]]]]

If there are no EPP-features, there is no argument here for MOM. This is an advantage given the conceptual and empirical trouble that come with trying to maintain it.[1] However, if EPP-features are denied, what licenses expletives when they occur? Consider:

(5) There arrived a man.

One (old) intuition is that *there* serves to "transmit" Case to the associate and the ϕ-features of the associate to T/INFL. This was the intuition behind the 'coindexing' analyses offered in Chomsky (1986; KOL). KOL supposes that *there* and its associate are coindexed at D-structure, so that the initial representation of (1a) is as in (6):

(6) [*e* [Infl [seem [there$_i$ [to be [a man$_i$ in the room]]]]]]

This is buttressed in KOL with a technical discussion about CHAINS and Case/θ-relations so that when *there* raises to subject position, the CHAIN relation it instantiates serves to transmit Case to the associate, thus complying with the Visibility Condition (Aoun 1985).

Consider how this might be understood within current assumptions. Chomsky's (1998:60-61) discussion of Case sheds some light on this matter.

> Manifestation of structural Case depends on the interpretable features of the probe: finite T (nominative), *v* (accusative), control T (null), on earlier assumptions. We may therefore regard structural Case as a single undifferentiated feature […] Its manifestation depends on the interpretable features (namely ϕ-features) of the goal, so that it too can be taken to be undifferentiated as to the value of the individual features of the ϕ-set. For both probe and goal, the form of the uninterpretable features is determined by Agree. To rephrase in traditional terms, *verbs agree with nouns, not conversely, and Case is assigned* [italics ours—GDC].

One intuitive way of thinking of the idea (which is not the way Chomsky does) is that Case-assigners and -receivers "swap" Case for ϕ-feature specification. Thus, a DP and T/INFL might relate as sketched in (7). Now the transmission idea about expletive-associate relations we are going to develop could be depicted as in (8):

(7) [ϕ] ⟶
DP **INFL/T**
⟵ [NOM]

(8) ⟵ - - - - - - - - - - - - - - - - - [ϕ]
[ϕ] - - - - - - ⟶
Expl **INFL/T** **Assoc**
⟵ [NOM]
[NOM] ⟶

1. See Collins (1997), Johnson and Lappin (1997), Castillo et al. (1999), Frampton and Guttman (1999), Boeckx (2000), Shima (2000) on this issue.

Intuitively: T gets ϕ-features in exchange for the discharge of nominative Case. The associate has ϕ-features, and needs Case. What the expletive is able to do is mediate this exchange. Suppose that, contra Chomsky (1998), T has an empty ϕ-set. A reflex of the empty ϕ-set is the ability to discharge a Case (nominative on T, accusative on *v*).

With respect to Case and nominals, one of two technical routes are available. We can either (i) stick to the idea that Case is an illegible feature, or (ii) assume that nominals have no Case and implement the traditional "assignment" intuition. Either way, we can reformulate Chomsky's Agree operation as follows. Assume that T/*v* have empty ϕ-sets and that these items thus cannot on their own be a Probe that matches the (Goal) associate's ϕ-features. Empty ϕ-sets, then, are what trigger the need for a specifier (e.g., *A man arrived*) and empty ϕ-sets are associated with the 'reflex' of structural Case.

Chomsky claims that T/*v* are associated with ϕ-sets that are undifferentiated with respect to their values, but that they nonetheless contain a "full-complement" of ϕ-feature attributes (person, number, gender etc., all with unspecified/'zero' values). We are supposing that T/*v* have ϕ-sets that are more radically underspecified—ϕ-sets with no attribute- and thus no value-specifications. The difference between finite T and non-finite T (= T_{def}) can then be cast as the presence or absence of such a radically underspecified ϕ-set (T has one, T_{def} does not).

Now consider expletive *there*. Its crucial property is that it can somehow mediate the T-associate relation. This could be seen to follow if expletives have essentially the ϕ-set that Chomsky proposes for T/*v*. That is, a ϕ-set specified for attributes (person, number, gender), but not including values for these attributes (e.g., 3rd person, plural, masculine for *a man*). Now the Agree operation takes on a flavor of much work in unification-based approaches. The radically underspecified ϕ-sets of T/*v* must be unable to serve as a Probe in the T-associate relation, but must be suitable Goals (e.g. specifier of T must be able to target T as a Goal). Thus, when *a man* appears as SpecTP as in (31a), the Agree operation which fills in the ϕ-set of T.

(9) a. A man arrived.
b. There arrived a man.

The expletive case in (9b) involves the insertion of *there* licensed by its ability to enter into Agree with the fully specified ϕ-set of the associate. Now the expletive contains a ϕ-set with values for the ϕ-attributes. Suppose now that the expletive targets T as its Goal, and fills in missing attributes and values of T. And, following Chomsky, we view structural Case assignment as a reflex of this process (see below). The typology of items with respect to ϕ-sets is as in (10).

(10) **T_{def}**	**T/*v***	***there***	**nominals**
∅	[ϕ]: ∅	[ϕ]:	[ϕ]:
		per: ∅	per: (3rd)
		num: ∅	num: (sing)
		gen: ∅	gen: (masc)

Consider the possibilities that our suggestions make available with respect to potential Probe/Goal relations. There are nine possibilities:

(11)	**a.**	$\phi_{\mathbf{empty}}$	$\phi_{\mathbf{val}}$	**disallow (?)**
	b.	ϕ_{empty}	ϕ_{attr}	disallow (Last Resort)
	c.	ϕ_{empty}	ϕ_{empty}	disallow (Last Resort)
	d.	$\phi_{\mathbf{attr}}$	$\phi_{\mathbf{val}}$	**expletive-associate**
	e.	ϕ_{attr}	ϕ_{attr}	disallow (Last Resort)
	f.	ϕ_{attr}	ϕ_{empty}	disallow (Last Resort)
	g.	ϕ_{val}	ϕ_{val}	conflict/blocking effect
	h.	$\phi_{\mathbf{val}}$	$\phi_{\mathbf{attr}}$	**reflexives** (not pursued here)
	i.	$\phi_{\mathbf{val}}$	$\phi_{\mathbf{empty}}$	**NP-Case assigner**

Of the possibilities, only four (in bold) look to be potentially useful (and one of those is problematic, see below).[2] Interestingly, the five others are plausibly ruled out by a kind of local economy thinking: each step of a derivation has to be such that it does something to increase legibility. Assuming that anything but a fully specified ϕ-set constitutes an illegible object, if Agree unified pairs like (11b,c,e,f), this would involve no increase (in fact, no change) in legibility. Additionally, (11g) would be an instance of two items that are already fully specified and hence both legible, so Agree could not pair them.

Consider just the options that are allowed by Last Resort. If permitted, (11a) would enable T and some ϕ-set it c-commands to enter into Agree (as in Chomsky's system, thus reraising the need for the EPP). We stipulated above that an item with ϕ_{empty} cannot be a Probe. But it does not seem easy to make this follow from anything. What we want is to have empty ϕ-sets demand a specifier position. Further, we want the Agree operation to apply when ϕ_{attr} commands ϕ_{val} for the expletive-associate case, so we cannot introduce a general directionality constraint which insists on ϕ_{val} commanding the ϕ-sets that it renders legible under Agree. We can say is that Probes must have ϕ-attributes, so that both ϕ_{val} and ϕ_{attr} are included. Thus, prior to Agree, expletives and full nominals have properties which form a subset relation with respect to illegibility. Expletives are doubly deficient in that they have zero Case value and zero ϕ-values, while regular nominals only have zero Case. Assume for that ϕ_{empty} cannot be a Probe; we will return to this in a moment.[3]

There is an additional worry in connection with (11a) if we consider the status of direct objects in English. Under our assumptions, the derivation of *The man saw the woman* would have the stage shown in (12):

(12) [*v* [V [$_{\text{DP}}$ D N]]]

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2. We use the following notation in (11) and beyond: ϕ_{empty} = radically under-specified; ϕ_{attr} = just attributes; ϕ_{val} = includes specific values.

3. A full answer to these worries involves cross-linguistic discussion, which we have not the room for here.

According to our story thus far, *v* would have an empty ϕ-set and the DP would have a ϕ-set with values specified. This is exactly the situation in (11a). With respect to direct objects, there seem to be roughly four options (all of which have been defended in the literature): (A) objects move "covertly"; (B) objects move "overtly"; (C) objects do not move, but their features do (or, Agree); or (D) objects do not move period (their Case- and θ-positions are one and the same).

Note that we are predisposed here to reject (C) since we have followed Chomsky in rejecting feature movement and the technical problems it raises. And, if we were to permit Agree to apply in this case, we would be forced to accept (11a) as a general possibility and would have to introduce some other extra assumption to rule it out for the T-associate relation we have just been discussing above.

We are also inclined to reject option (A) since it involves a pre- vs. post-Spell-Out movement distinction and an attendant notion of "strong" vs. "weak" features. The notion of strong features seems easy enough to motivate on PF-grounds—those languages with overt agreement require overt movement. Under the view of the categories T and *v* that we have been pursuing, lack of movement to allow Agree to fill-in the ϕ-sets of such items would result in an item being sent to PF with no specification for its inflection. But weak features have no motivation under this view. There is theory-internal motivation (i.e. to have only a Spell-Out difference involved) but it seems to miss the intuition about strong features which is tied to overt-/PF-manifestation of inflectional morphology. Weak features force a spurious kind of generality into the system. Rejecting this generality leads to the following view with respect to "morphologically motivated" movement: either there is overt movement (i.e. movement is morphologically motivated) or there is no movement (i.e. movement is not morphologically motivated, so it cannot happen). This view would take the lack of object agreement in a language like English to signal the impossibility of object movement. In simple transitive constructions the direct object is in situ. This means that this object must receive its Case and θ-role in the same syntactic position (i.e. head-complement relation). Put another way, direct objects are inherently Case-marked. This could explain the impossibility of an expletive associating with the object of simple transitives:

(13) a. *The man saw there a woman.
b. *The man there saw a woman.

We could generally take the possibility of expletive-insertion to correspond to situations in which Case and θ are not assigned in the same position. Thus, in raising, passives, unaccusatives, ECM-constructions, we would expect to see expletives, but not elsewhere.

This leads straight to another consequence—the denial of the VP-internal subject hypothesis. Assuming subjects are generated within the VP-shell and move out to their surface position (in which they enter into the Case-Agreement relations), English should allow Transitive Expletive Constructions with the expletive associated with the subject:

(14) *There the man saw the woman.

(15) *There a man jumped.

Analogues of these are found in other languages (cf. Platzack 1983, Maling 1988, Zwart 1992, Jonas and Bobaljik 1993, Vikner 1995). But it would be perfectly consistent to deny the VP-internal subject hypothesis and suggest that languages can differ with respect to how many positions are licensed outside VP (see Bobaljik and Thráinsson 1998). This rejection does not worry us very much, given how close it actually is to other versions of subject/external θ-role assignment that are currently on offer and how subtle the actual differences between the 'internal' vs. 'external' views are (as pointed out in Williams 1994).

From this perspective, our earlier worries about (11a) dissolve. This is so because subjects are always base-generated (in English) in their Case/Agreement positions (excluding the expletive/associate situation). So the situation of the empty ϕ-set c-commanding the full one can only be resolved by the expletive-insertion strategy, and we can maintain generally that empty ϕ-sets cannot be Probes. We will examine these issues in some more detail below in the discussions of Control, Raising, and ECM.

To sum up, we have modified Chomsky's Agree operation, and denied that T_{def} is able to host a specifier position in virtue of not having a ϕ-set (not even an under-specified one). Our reformulation reinvigorates the transmission hypothesis in a technical way that captures the underlying theoretical intuition rather directly.

It might be objected that this conception merely replaces the EPP with another mysterious object—empty ϕ-sets. But we consider this to be an advance. The notion of an empty ϕ-set makes conceptual sense under the 'traditional' view that T agrees with NP and not vice versa. What this view says is that T is capable of having ϕ-values, and furthermore must be so specified. The novelty is the attribution of the 'full-complement' of (valueless) ϕ-attributes to expletive-there. But this also seems to be the right way to think about this item. Note that in Chomsky's account, *there* has just a [person] feature and is able to check EPP, and the T-associate relation is independent of this fact. Agree applies to the T-associate pair regardless of whether the expletive is inserted or whether something moves to check the EPP. The need for the EPP and the postulation of the lone [person] feature follow directly.

For us, in contrast, it follows directly that (i) the presence of *there* allows 'long-distance' agreement and (ii) *there*'s absence requires a specifier with ϕ_{val}. These mechanics replace the EPP. For Chomsky, the EPP is necessary because he parcels out the licensing of expletive and the T-associate relation into independent components. The presence or absence of movement is understood exactly to the extent that we understand what EPP-features are. We take this as extremely strong conceptual support for our alternative conception of these matters. But, our claim that T_{def} cannot host a specifier has other potential consequences, some of which we examine next.

4. Raising

Consider (16) first, a raising construction:

(16) a. [John [seems [t [to be likely [t [to appear [t [to be [t ill]]]]]]]]]
b. [John [seems [to be likely [to appear [to be [t ill]]]]]]

(16a) is the standard structure, including intermediate traces in each specifier of each non-finite T. In the corresponding derivation, each movement checks the EPP-feature hosted by each intermediate T. Removal of the EPP yields a derivation corresponding to (16b) under our account. There are a few things worth noting about the motivations for the standard view.

First, the reality of these intermediate movements is suggested by data such those in (17).

(17) a. *A man is likely there to be in the room.
b. *A man is likely it is in the room.

These kinds of violations are explained on standard assumptions if the movements in raising constructions are required to be strictly local. If any specifier of T is occupied, the movement is blocked. For us, the ill-formedness of these examples follows right away from the total inertness of the intermediate T_{def} projections. Nothing can occupy these specifiers, so Merge of anything to this position violates Last Resort.

Second, there are cases that seem to be counterexamples for our proposal. David Pesetsky (p.c.) credits Danny Fox with pointing out the following problem for a denial of intermediate A-movements:

(18) a. $John_i$ seems to Mary to appear to $himself_i$ to be ill.
b. *Mary seems to $John_i$ to appear to $himself_i$ to be ill.
c. *$Mary_k$ seems to $John_i$ [t_k [to appear to $himself_i$ t_k to be t_k ill]]

If T_{def} cannot host a specifier as we claim, then typical cases of raising must involve "one-fell-swoop" movement over the 'inert' T_{def} projections and directly to the matrix T (see also Epstein and Seely 1999). Under the standard assumptions, the binding of the reflexive is unproblematic in (18a) since *John* has raised from its base position *over* the reflexive to the specifier of *to appear* and then subsequently raised to its surface position. Thus we understand the reflexive to be locally bound in virtue of the trace/copy in the intermediate position. (18b) is ruled out in virtue of a 'blocking effect' since *Mary* has raised through the specifier of *to appear* as in (18c). Thus typical binding requirements could rule out (18b) on the assumption that the intermediate movement really takes place (which we are now problematically denying).

While we do not have time and space in this essay to develop a full story about binding and reconstruction/connectivity, there are some things to consider about these cases. First, it appears that datives like *to John* in (18) can bind out of their PPs, as (19) seems to suggest.

(19) a. It seems to every boy to appear to his mom that Mars is flat.
b. It seems to no man to appear to any woman that Mars is flat.
c. *It seems to him_i to appear to $John_i$ that Mars is flat.
d. It seems to his_i mother to appear to $John_i$ that Mars is flat.
e. It seems to $John_i$ to appear to him_i/$himself_i$ that Mars is flat.

Variable binding by a quantifier (19a), negative polarity licensing (19b), Condition C violations and their absence (19c,d), and reflexive binding (19d) all seem to point towards this conclusion.

However, the non-complementary distribution of pronoun and reflexive shown in the last example is suggestive of the need to examine this situation more closely. There is a pretty compelling case to be made that *himself* in these constructions is actually a logophor.

(20) a. $John_i$ kissed Mary after/before/because/since it appeared to…
b. Mary kissed $John_i$ after/before/because/since it appeared to…
… $himself_i$ that the earth was flat.

(21) a. [The possibility that he/John would lose] appeared to himself to be plausible.
b. [The possibility that Mary would lose] appeared to John to…
c. *[The possibility that John would lose] appeared to Mary to…
… seem to himself to be plausible.

In (20a,b), *himself* appears in the *to*-phrase in an adjunct, yet *John* is accessible as an antecedent in either subject or object position. In (21a) the antecedent for *himself* is buried inside the subject NP but is nonetheless accessible. As in the case of the datives in the raising constructions, command seems to be completely unnecessary. It is plausible that the "blocking effect" in (18) is a matter of a preference for a c-commanding antecedent where one is available, and does not require the postulation of an intermediate movement to the $Spec T_{def} P$ as it seemed at first blush. On such a view, it must be the case that when the preferred (c-commanding) antecedent does not agree, this cannot be overridden in any way to access some other potential antecedent. This would make the non-complementary distribution pronouns (noted above) intelligible since the evidence seems to point to this not being a case of ordinary anaphora. Rather, *himself* in these cases appears to be logophoric. Along these lines, note the contrast between (21b) and (21c). This suggests something of a hierarchy of accessibility preferences: c-commanding antecedents are demanded over m-commanding antecedents which are demanded over "other" antecedents. (21a) shows that even m-command is unnecessary for *himself* to be bound. Further, the (21b) versus (21c) contrast shows the same kind of blocking effect that we saw in the original apparent counterexamples, but in a way that suggest that this may have nothing at all to do with intermediate traces. In (21b), of the available antecedents, the 'better one', structurally speaking, is the one that happens to also have matching ϕ-features, so all is well. But in (21c), the 'better' antecedent happens to be one that does not match in ϕ-features, and coreference is blocked.

Such an apparent structural preference hierarchy could account for data such as (18), which appear to be instances of logophoricity, not anaphoricity (cf. Sells 1987, Reinhart and Reuland 1993).

5. Quantifiers

Consider another sort of evidence for intermediate traces of A-movement—so-called Q(uantifier)-Float.

(22) a. The boys seem **all** to appear to like ice cream.
b. The boys seem to **all** appear to like ice cream.
c. The boys seem to appear **all** to like ice cream.
d. The boys seem to appear to **all** like ice cream.

Sportiche (1988), suggests that *all* in these examples is initially associated with the DP (*all the boys*) in its lowest (i.e. θ-)position, and that *the boys* moves independently, 'stranding' *all* in its base position. Since the DP can obviously move together with the quantifier (*all the boys seem to like ice cream*), there is the possibility that any one of the moves the DP makes could strand *all*. Under these assumptions, the positions in which *all* may surface serves as a record of such movement relations. This would suggest that non-finite T can host a specifier.

There are (at least) two other trains of thought on these matters. One we may refer to (this time accurately) as the "Q-Float" theory which posits independent movement of *all* to the surface positions in which it appears, and the other we can call the "Base Generation" view, which understands *all* to simply adjoin where it appears without it being involved in any movement relation.[4] We take the availability of these other analytical options to suggest that this is not a serious worry for our denial of the EPP. In fact, to the extent that what we have proposed here is correct, our results could help decide some of these related issues. Put another way, if there is no EPP, then the Sportiche analysis simply cannot be correct.

6. Control

Our proposal with respect to Control should by this point be obvious and we will not have much to say on this matter (though this will clear up some details we left dangling above in the discussion of Agree). There are a couple of proposals currently that are compatible with denying the existence of the EPP, Hornstein (1999, 2000) and Manzini and Roussou (2000). Both approaches aim to eliminate the Control Module by assimilating Control and Raising, and both require a rethinking of the θ-criterion. Consider (23) and Hornstein's (24) and Manzini and Roussou's (25) derivations:

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4. Proponents of the "Q-Float" view include Postal (1974), Kayne (1975), Fiengo and Lasnik (1976), Maling (1976), and Baltin (1982). Defenders of the "Base Generation" view include Klein (1976), Williams (1980, 1994), Dowty and Brodie (1984), and Bobaljik (1995).

(23) John expects to want to leave.

(24) [John$_{\theta\theta\theta}$ [$\mathbf{t}_{\theta\theta\theta}$ [expects [$\mathbf{t}_{\theta\theta}$ [to [$\mathbf{t}_{\theta\theta}$ [want [$\mathbf{t}_{\theta}$ [to [$\mathbf{t}_{\theta}$ leave]]]]]]]]]]

(25) a. [John [T [$^{\theta}$expect [to [$^{\theta}$want [to $^{\theta}$leave]]]]]]
b. [John$^{\theta\theta\theta}$ [T [expect [to [want [to leave]]]]]]

Hornstein assumes that Control and Raising are just the same thing really; the difference between them is only whether the DP which raises through a position 'picks up' a θ-role. For Hornstein, θ-roles are features which can be 'assigned' to DPs. The derivations he proposes include movement through the specifiers of non-finite T, but there is nothing necessary about this, given that those are not θ-positions.

Manzini and Roussou view the overt DP (the 'controller') as being base-generated in its surface position and 'attracting' all the unassigned θ-roles that it can. So, as with Hornstein's view, the difference between Control and Raising is simply a matter of how many θ-roles the subject DP comes to be associated with. Their view also makes the denial of the EPP possible (they themselves point out this feature of their system with respect to embedded clauses).

Both of these views suggest to us that Control phenomena does not present any difficulty for denying the existence of the EPP. However, given our remarks about the Agree operation discussed above, we actually have reason to favor the Manzini and Roussou account. Recall that we suggested abandoning the VP-internal subject hypothesis in order to head towards an understanding of expletive insertion that traded on the (im)possibility of separating Case and θ-assignment —where these occur in different positions, we expect expletives, otherwise not. This comes down to the claim that Case and θ are generally not realized in structurally distinct configurations connected by movement (at least not in English). The view offered by Manzini and Roussou allows us to maintain this. We can say that in the general case items enter the syntax through their Case position and attract θ-roles.

7. ECM

Exceptional Case Marking (ECM) presents us with another sort of puzzle since *a man* and *there* in (26a,b) appear to be in exactly the position that we claim must be empty.

(26) a. John believes a man to be in the room.
b. John believes there to be a man in the room.

However, note that the EPP-based understanding of the structural position of these ECM subjects runs into trouble with cases where the expression is not in the specifier of any T, but rather in a small clause:

(27) a. John believes [$_{SC}$ a man likely to be in the room].
b. John believes [$_{SC}$ there likely to be a man in the room].

Given our denial of the EPP, it must be the case that ECMed subjects must in fact be in some functional projection of the matrix clause. This in turn suggest that there is overt verb movement in these cases, since *believe* appears in front of the embedded subject. Cases of overt verb and object movement in English have been argued for by a number of researchers.[5] Consider then possible derivations for (26):

(28) a. [John [T [believe a man [~~believe~~ [to be in the room]]]]]
b [John [T [believe there [~~believe~~ [to be a man in the room]]]]]

The conclusion is forced on our view—as in Epstein and Seely's (1999) similar rejection of the EPP—since *a man*/*there* cannot occupy the specifier of T_{def}. Assuming the suggestions of previous sections are correct, the ECMed expressions can be viewed as being base-generated as the specifier of *believe* or some functional projection above it. In (28a) *a man* will thus receive structural accusative (*believe* does not have a θ-role to assign, so it will not 'inherently' mark this expression and Case thus works here like it does with nominative and T—i.e. Spec-Head). In (28b) *there* is inserted and Agree takes care of the Case/agreement swap between the accusative Case assigning object (*believe* itself or some functional head) and the associate in the embedded clause. These cases differ from objects in simple transitives in that the latter will involve Case and θ-assignment in a single position.

One complication arises which we can only mention, involving so-called *wager*-class verbs (Boskovic 1997, Pesetsky 1991, Postal 1974). These allow ECMed *there*, but not a regular nominal. Space precludes a closer examination of these cases, so we leave them for the future.

(29) a. *John wagered a man to be in the room.
b. John wagered there to be a man in the room.

8. Last Remarks

Chomsky's (1998) proposals remove the only remaining redundancy between the EPP and Case/agreement mechanisms. Whereas in the earlier approach (Chomsky 1995), both the EPP and Case/agreement were checked by the subject of finite clauses, in the more recent Agree-based framework, only the EPP is checked (Case/agreement are licensed in the subject's base-position).

This move has an interesting consequence: the EPP is the sole reason for movement, since Agree enables other relations to be satisfied without displacing anything. This means that we understand movement to the extent that we understand the EPP (and vice versa). This position is further underscored in Chomsky's discussion of "phases" and successive cyclic movement. The heads that Chomsky claims signal phases, *v* and C, are eligible for assignment of optional EPP-features which can drive intermediate movements of e.g. Wh-phrases.

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5. See Johnson (1991), Koizumi (1993), Lasnik and Saito (1993), Lasnik (1995), Boskovic (1997), Epstein and Seely (1999), Grohmann (2000).

Our proposed strategy to understanding the EPP by "trying to live without it," we have argued, yields a plausible alternative account of some phenomena for which the EPP has been evoked (such as *there*-expletives) and suggests that in other cases the EPP can be eliminated without cost, given recent advances in analytical work dealing with control and raising within the minimalist program.

We have further suggested that A-movement, understood as displacing a formative from one position in a phrase-marker to another, does not exist. The mechanics of Case/agreement relations and theta-theory that we have proposed/adopted demands that certain configurations obtain for nominals to be properly licensed, and this is accomplished without appeal to the EPP. However, this essay has offered only a preliminary sketch, and there exists a much wider range of data that must be addressed in order to establish that our course is empirically sustainable. But the direction of this research program is, we think, supportive of the possibility of avoiding the introduction of mysteries (like the EPP) to solve problems (e.g. 'why movement?').

References

Aoun, J. 1985. *The Grammar of Anaphora*. Cambridge, MA: MIT Press.

Baltin, M.R. 1982. A Landing Site Theory of Movement Rules. *Linguistic Inquiry* 13, 1-38.

Bobaljik, J.D. 1995. *Morphosyntax: The Syntax of Verbal Inflection*. Doctoral dissertation, MIT.

Bobaljik, J.D. and H. Thráinsson. 1998. Two Heads Aren't Always Better then One. *Syntax* 1, 37-71.

Boeckx, C. EPP Eliminating. Ms., University of Connecticut.

Boskovic, Z. 1997. *The Syntax of Non-Finite Complementation: An Economy Approach*. Cambridge, MA: MIT Press.

Castillo, J.C., J. Drury, and K.K. Grohmann. 1999. Merge over Move and the Extended Projection Principle. In S. Aoshima, J. Drury, and T. Neuovonen (eds.) *University of Maryland Working Papers in Linguistics* 8, 63-103.

Chomsky, N. 1986. *Knowledge of Language: Its Nature, Origin, and Use.* New York: Praeger.

Chomsky, N. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.

Chomsky, N. 1998. Minimalist Inquiries: The Framework. *MIT Occasional Papers in Linguistics* 15. Cambridge, MA: MITWPL.

Collins, C. 1997. *Local Economy*. Cambridge, MA: MIT Press.

Dowty, D. and B. Brodie. 1984. A Semantic Analysis of "Floated" Quantifiers in a Transformationless Grammar. In M. Cobler, S. MacKaye and M.T. Wescoat (eds.) *Proceedings of WCCFL*. Stanford Linguistics Association, 75-90.

Epstein, S.D. and D. Seely. 1999. On the Non-Existence of the EPP, A-Chains, and Successive Cyclic A-Movement. Manuscript, University of Michigan and Eastern Michigan University.

Fiengo, R. and H. Lasnik. 1976. Some Issues in the Theory of Transformations. *Linguistic Inquiry* 7, 182-191.

Frampton, J. and S. Guttman. 1998. Cyclic Computation: A Computationally Efficient Minimalist Syntax. Manuscript, Northeastern University.

Grohmann, K.K. 2000. Prolific Domains. Presented at New York University.

Hornstein, N. 1999. Movement and Control. *Linguistic Inquiry* 30, 69-96.
Hornstein, N. 2000. *Move! A Minimalist Theory of Construal*. Oxford: Blackwell.
Johnson, D. and S. Lappin. 1997. A Critique of the Minimalist Program. *Linguistics & Philosophy* 20, 272-333.
Johnson, K. 1991. Object Positions. *Natural Language and Linguistic Theory* 9, 577-636.
Jonas, D. and J.D. Bobaljik. 1993. Specs for Subjects: The Role of TP in Icelandic. In J.D. Bobaljik and C. Phillips (eds.) *Papers on Case and Agreement I. MIT Working Papers in Linguistics* 18. Cambridge, MA: MITWPL, 59-98.
Kayne, R. 1975. *French Syntax: The Transformational Cycle*. Cambridge, MA: MIT Press.
Klein, S. 1976. A Base Analysis of the Floating Quantifier in French. In *Proceedings of NELS VII*, MIT.
Koizumi, M. 1993. Object Agreement and the Spilt-VP Hypothesis. In J.D. Bobaljik and C. Phillips (eds.) *Papers on Case and Agreement I. MIT Working Papers in Linguistics* 18. Cambridge, MA: MITWPL, 99-148.
Lasnik, H. 1995. Last Resort. In S. Haraguchi and M. Funaki (eds.), *Minimalism and Linguistic Theory*. Tokyo: Hituzi Syobo, 1-32.
Lasnik, H. and M. Saito. 1993. On the Subject of Infinitives. *Papers from the 27th Regional Meeting of the Chicago Linguistic Society*, 324-343.
Maling, J. 1976. Notes on Quantifier-Postposing. *Lingusitic Inquiry* 7, 708-718.
Maling, J. 1988. Variations on a Theme: Existential Sentences in Swedish and Icelandic. *McGill Working Papers in Linguistics: Special Issue on Comparative Germanic Syntax*. Montreal: McGill University, 168-191.
Manzini, R. and A. Roussou. 2000. A Minimalist Theory of A-Movement and Control. *Lingua*.
Pesetsky, D. 1991. Zero Syntax II: An Essay on Infinitives. Ms., MIT.
Platzack, C. 1983. Existential Sentences in English, Swedish, German and Icelandic. In F. Karlsson (ed.), *Papers from the Seventh Scandinavian Conference of Linguistics*. Helsinki: University of Helsinki, 80-100.
Postal, P. 1974. *On Raising*. Cambridge, MA: MIT Press.
Reinhart, T. and E. Reuland. 1993. Reflexivity. *Linguistic Inquiry* 24, 657-720.
Sells, P. 1987. Aspects of Logophoricity. *Linguistic Inquiry* 18, 445-479.
Shima, E. 2000. A Preference for Move Over Merge. *Linguistic Inquiry* 31, 375-385.
Sportiche, D. 1988. A Theory of Floating Quantifiers and Its Corollaries for Constituent Structure. *Linguistic Inquiry* 19, 425-49..
Vikner, S. 1995. *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford: Oxford University Press.
Williams, E. 1980. Predication. *Linguistic Inquiry* 11, 208-238.
Williams, E. 1994. *Thematic Structure in Syntax*. Cambridge, MA: MIT Press.
Zwart, C.J.-W. 1992. Dutch Expletives and Small Clause Predicate Raising. In *Proceedings of NELS 22*. Amherst, MA: GLSA, 477-491.