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## Adventures in Resolving Redundancy: Case vs. the EPP

# Adventures in Resolving Redundancy: Case vs. the EPP\*

Thomas McFadden

## 1 The redundancy and previous attempts to get rid of it

This paper is concerned with the two principles that are generally assumed to regulate the surface distribution of DPs, syntactic Case (a requirement that every DP be structurally licensed), and the EPP (a requirement that (certain) clauses have a subject, or perhaps that certain functional heads have a specifier). Much recent work, which I will discuss in this section, has been directed at reducing the redundancy in the coverage of these two principles by finding ways to do without the EPP. However, as I will show in Section 2, certain crucial assumptions which underlie this work are incorrect. In Section 3 I will propose instead that, if anything, we should try to do without syntactic Case, and in Section 4 I will discuss data which present a challenge to such a move and suggest how we might go about dealing with them in a Case-less theory.

It is well known that syntactic Case and the EPP are largely redundant in their regulation of the distribution of DPs. This is especially clear in instances of raising to subject:

- (1) a. \* seems to be John ill.  
b. John seems to be ill.

Sentence 1a could be ruled out because *John* is not in a position where Case can be assigned or checked, but it could just as easily be ruled out because there is no subject to satisfy the EPP in the matrix clause. Both objections are satisfied by raising *John* as in 1b.<sup>1</sup> This leads us to question whether both principles are really needed. In fact, a number of researchers (e.g. Martin (1999), Epstein and Seely (1999), Grohmann, Drury and Castillo (2000), Boeckx (2000) and Bošković (2001)) have argued in this connection that we might be able to do without the EPP, proposing various means to account for those effects of the principle that are not strictly redundant with those of Case.

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\*I would like to thank Tony Kroch, Dave Embick and the audience at PLC26 for comments and discussion.

<sup>1</sup>In recent versions of Minimalism (Chomsky 2000, 2001), Case features appear only on DPs (not on T), and they can be checked off without movement under Agree. Thus it is only the EPP feature on T that actually drives raising to subject. Still, once a DP has its Case feature checked off it is no longer visible for attraction by EPP features. Thus in 1b, unchecked Case allows the raising, while the EPP forces it.

The stated motivation for choosing to eliminate the EPP in favor of Case is that the former is, at present, a stipulation. Specifically, despite attempts to derive its effects from requirements on syntactic predication,<sup>2</sup> the EPP remains little more than the descriptive statement that certain functional heads require subjects. It is thus reasoned that, if the full empirical coverage of the EPP could be derived from syntactic Case and other independent principles of grammar, this stipulation could be eliminated and our theory of grammar simplified. The authors cited above differ considerably in the details on how exactly this should be done, but at least the following three issues must be dealt with.

First, one must capture the requirement on surface subjects in finite clauses. The raising of *John* in 1b can be driven by that DP's need for Case, but something else is needed to drive the insertion of expletives:

- (2) a. \* Is raining.  
 b. It is raining.
- (3) a. \* Seems that no one is home.  
 b. It seems that no one is home.

The verb in 2 takes no thematic argument, so there is no DP that could require Case, and in 3 the only argument in the sentence, *no one*, gets Case just fine in the subordinate clause, yet both sentences are bad unless an expletive is inserted to fill the highest subject position. Generally, in the absence of the EPP, the so-called Inverse Case Filter is used to account for this, according to which those heads which *can* assign Case *must* assign Case. Note that in addition to being difficult to distinguish conceptually from the EPP, the ICF is unformulable under certain recent versions of Minimalism.<sup>3</sup>

Second, an explanation is required for why *John* must appear before *to* in the following sentences:

- (4) a. \* I expect to John be late.

<sup>2</sup>See Rothstein (1983) and Heycock (1991). The standard argument against such an account is that, since the EPP can be satisfied by semantically null expletives, predication-based attempts to 'explain' the EPP are doomed to failure. However, predication as intended here is not a semantic notion. Heycock explicitly speaks of syntactic predication, which may in turn have its origins in discourse rather than semantics (as suggested by Tony Kroch, p.c.). In any case, while it is true that the ultimate motivations for the EPP remain unclear, Case is in no better shape, as will be seen below.

<sup>3</sup>The standard formalization of the ICF is that the uninterpretable Case feature on T causes the derivation to crash if it is not deleted in the process of checking Case on a DP. However, as mentioned in footnote 1, Chomsky (2000,2001) argues that functional heads like T have no Case feature which could drive the ICF. Grohmann et al. (2000) use categorial and  $\phi$ -features to drive movement instead of the ICF.

- b. I expect John<sub>i</sub> to t<sub>i</sub> be late.

Movement to the embedded subject position can be straightforwardly driven by the EPP. Those who would do without that principle are forced to assume that English has overt object shift. While there are, in fact, good arguments that some form of short OS occurs in English, the point remains a matter of controversy and intense research, and if Lasnik (2001) is correct, the movement that does occur is in fact optional. Without the EPP this would still predict incorrectly that both 4a and 4b should be possible. See also Boeckx (2000), Bošković (2001) for discussion of this rather thorny issue.

Third, something must be said about Successive Cyclic Movement, the apparent fact that raising proceeds step-by-step through intermediate specifiers (examples from Bošković (2001)):

- (5) The students<sub>i</sub> seem all t<sub>i</sub> to know French.  
 (6) a. Mary<sub>i</sub> seems to John [<sub>IP</sub> t<sub>i</sub> to appear to herself to be in the room].  
 b. \*Mary<sub>i</sub> seems to John [<sub>IP</sub> t<sub>i</sub> to appear to himself to be in the room].

The position of *all* in 5 is frequently explained by assuming that *the students* has moved through that position and stranded the quantifier there. Similarly, the availability of the anaphor *herself* in the embedded clause in 6a, and the impossibility of *himself* in 6b follow if *Mary* has moved through the intermediate specifier leaving a trace that binds the anaphor in the first example and blocks binding by a higher antecedent in the second. This SCM has been derived by saying that the EPP applies in every intermediate clause. Boeckx (2000) and Bošković (2001) have tried to circumvent this dependence on the EPP by deriving SCM from general constraints on movement, while Grohmann et al. (2000) and Epstein and Seely (1999) deny the existence of SCM altogether.

However, even if ways can be found to deal with these three issues satisfactorily, a deeper problem remains. Specifically, the basic assumption on which the aforementioned attempts to eliminate the EPP are founded is incorrect. It is posited that syntactic Case is indispensable and well-motivated in ways that the EPP is not. Yet beside the claims that the EPP is stipulative and poorly understood there is conspicuously little discussion of how Case might be any different.<sup>4</sup> It seems that the (tacit) basis for this assumption is

<sup>4</sup>Martin (1999) is an exception in this regard. In addition to presenting empirical arguments for syntactic Case, he makes a suggestion as to why human language should have such an apparent imperfection. Curiously enough, as he points out himself, his suggestion applies equally well to the EPP.

the connection with morphological case. The existence of morphological case in many languages of the world is an empirical fact, and since the beginnings of Case theory, it has been argued that this is just a language-specific manifestation of the universal syntactic Case that licenses DPs. As long as this is correct, syntactic Case is indeed empirically indispensable.<sup>5</sup> However, as we will see in the next section, there is abundant evidence that this is not correct.

## 2 But Case isn't case

As a number of researchers (e.g. Marantz (1991/2000), Harley (1995), Schütze (1997) and Sigurðsson (2001)) have shown, morphological case is not only distinct from syntactic Case, it is quite independent of it. The argument for divorcing the two is in three parts, which I present here in brief:<sup>6</sup>

First, the relationship between structural positions and particular morphological cases is not one-to-one but many-to-many. In languages like Icelandic, Japanese and Hindi, although the normal subject case is nominative, some structural subjects are dative. Furthermore, nominative case can mark certain structural objects. Sentence 7 conveniently shows both a non-nominative (in this instance dative) subject and a non-subject nominative:

- (7) Henni hefur alltaf þótt Ólafur leiðinlegur.  
 her:DAT has always thought Olaf:NOM boring  
 'She has always found Olaf boring.'

Zaenen, Maling and Thráinsson (1985) demonstrate on the basis of subject raising, reflexive binding, word order facts and several other diagnostics that the preverbal argument in such sentences is in fact the subject, yet it is marked dative, while the object is marked nominative. Indeed, it appears that Icelandic 'structural' cases are not assigned according to structural positions at all, but rather according to a sequence or hierarchy.<sup>7</sup>

<sup>5</sup>I do not mean to imply that syntactic and morphological Case are assumed to be the same thing. Nonetheless, it *has* generally been assumed that the two are deeply connected, and that one can be derived from the other.

<sup>6</sup>In this section I follow Schütze's proposal to replace the term syntactic Case with DP-licensing in order to avoid confusion.

<sup>7</sup>That is, after all lexical cases (like the quirky dative in 7) have been discharged, the highest remaining structural argument (regardless of whether it is in subject or object position) is assigned nominative, and the second highest, if there is one, is assigned accusative. See Zaenen, Maling and Thráinsson (1985), Yip, Maling and Jackendoff (1987), Marantz (1991/2000) and Bittner and Hale (1996) for analyses of this

Second, morphological case can be assigned to positions where no overt DP is licensed, as Sigurðsson (1991) has shown:<sup>8</sup>

- (8) a. *Barninu batnaði veikin einu.*  
 the-child:DAT recovered the-disease:NOM alone:DAT.NEUT  
 'The child recovered from the disease alone.'  
 b. *Að PRO batna veikin einum er erfitt.*  
 to PRO:DAT recover the-disease alone:DAT.MASC is difficult  
 'To recover from the disease alone is difficult.'

The adjective *einu* in 8a agrees with the quirky dative subject *Barninu* of which it is predicated. Oddly enough, *einum* in 8b is dative as well,<sup>9</sup> even though there is no overt subject for it to agree with. Sigurðsson argues convincingly that the adjective is agreeing with PRO, which thus must have been assigned dative case. This is troubling if, as is generally assumed, it is Case that licenses overt DPs. If, however, morphological case and DP-licensing are independent, it is unremarkable.<sup>10</sup>

Third, there is evidence that DPs can be licensed in positions where they are assigned no morphological case. Schütze (1997, 2001) argues that every language has a default case which is inserted in the morphology on any DP which has not been assigned a case by the syntax. The best cross-linguistic evidence for this comes from left dislocated DPs. These typically match the case of the DP they are associated with, but when matching is blocked, a default case appears. Consider the following examples Schütze gives from English (default case accusative) and German, Russian and Arabic (default case nominative):

- (9) Me, I like beans.  
 (10) *Der/\*Dem Hans, mit dem spreche ich nicht mehr.*  
 the-NOM/\*DAT Hans with him-DAT speak I not more  
 'Hans, I don't speak with him anymore.'

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phenomenon.

<sup>8</sup>See Vanden Wyngaerd (1994) for similar data from Latin and Ancient Greek.

<sup>9</sup>The difference in the forms of the endings reflects a difference in gender, not case.

<sup>10</sup>Recall that in GB it was assumed that overt DPs appear in Case positions, PRO in non-Case positions. Even if we adopt instead the 'null Case' approach to the distribution of PRO developed in Chomsky and Lasnik (1993) and Martin (2001), it is clear that morphological case and DP licensing are operating independently here. The subject of *batna* receives dative case whether it is licensed to be overt or not.

- (11) Vanja/?Vanju, ego ja ne ljubju.  
 John-NOM/?ACC him-ACC I don't like  
 'John, I don't like him.'
- (12) al-kitaab-u qara?t-u-hu.  
 the-book-NOM read-1SG-it  
 'The book, I read it.'

There does not seem to be anything in the left-dislocation construction that could be assigning these cases, and crucially, the case that appears here in each language is the case that shows up in that language in other environments that lack a case-assigner.<sup>11</sup> The easiest explanation is therefore that the relevant case is supplied in such environments as a morphological default. Crucially, however, note that a default can never license anything. The concepts of default and licenser are simply incompatible. If a default case is available, it will be supplied in all instances where no case has been assigned, thereby 'licensing' everything.

Given this three part argument, we must conclude that the previously assumed link between morphological case and syntactic Case was illusory.<sup>12</sup> Now, taken by itself, this does not mean that there is no such thing as DP licensing/syntactic Case. Rather, it means that the existence of morphological case cannot be used to justify the assumption of syntactic Case, which thereby loses any advantage it might have had over the EPP in terms of independent empirical motivation. Therefore, an attempt to reduce the redundancy between the two cannot begin by assuming that Case is untouchable.

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<sup>11</sup>See Schütze (1997,2001) for extensive additional data and argumentation for this analysis. Some additional environments where he suggests default case may be showing up are conjoined subjects, appositives, ellipsis contexts, bare DP replies to questions and the subjects of small clauses, Mad Magazine sentences and NP-ing gerunds.

<sup>12</sup>While it is true that some degree of separation has been implicit since the concept of quirky Case was introduced into the theory, mismatches between syntactic and morphological case have generally been treated solely as lexical exceptions, not necessarily indicative of anything deeper. That is, it is still assumed that morphological case spells out syntactic Case unless inherent or quirky case intervenes. For example, Chomsky (2001) revises his view on how uninterpretable features are checked off in order to preserve precisely this connection. Adopting the DM view that phonological material is inserted after Spell-Out, he proposes that checking of features cannot amount to their deletion as was previously assumed. Rather, it must consist in feature 'specification.' This is only necessary because he still intends for syntactic Case features to be instrumental in the determination of morphological case.



### 3 Why do DPs really move?

We are left then with two poorly understood principles, each lacking credible external motivation, both working to regulate the position of DPs. Yet there are empirical arguments for both, and eliminating either one in a satisfactory way that deals with all of these arguments will be difficult, perhaps even impossible. Indeed, it's difficult to know where to start, since we have no *a priori* reason to think that either set of arguments is more convincing than the other. Nonetheless, if we consider what each principle actually claims at a conceptual level, I think there may be reason to choose between them. It is a given that certain DPs move to get into a local relationship with certain heads. The premise of abstract Case is that this occurs (at least in part) to satisfy needs of the DP, while the premise of the EPP is that it occurs (at least in part) to satisfy needs of the functional head. The question is whether both ideas are correct, as is generally assumed, or just one. I submit that there are (at least) three reasons to think that it is only the needs of the functional heads that drive the movement.<sup>13</sup>

In the first place, only those DPs that end up with 'structural' Case are required to move to be licensed. Objects of prepositions and DPs receiving inherent or semantic case<sup>14</sup> have no such requirements. This is somewhat unexpected if Case-licensing is a universal requirement of DPs. The standard assumption is that these types of DPs are 'licensed in situ', perhaps by the P head, but it would be simpler to assume that they never need licensing to begin with. (Why should the complement of P be licensed in situ while the complement of V is not?) We need only make the assumption defended here that movement is to satisfy the EPP. The question then is why objects of Ps cannot move to satisfy the EPP, and the answer is that A-movement out of PPs is generally banned.<sup>15</sup> When, for whatever reason, this ban does not apply, as in cases of preposition stranding, the DP *can* move to satisfy the EPP.

<sup>13</sup>It is interesting to note that the researchers who wish to eliminate the EPP do not consider the problem from this point of view and do *not* argue that features of the functional heads play no role. Indeed, as pointed out above, most of them rely on the ICF, a requirement that certain functional heads actually check Case. Perhaps it should count as an advantage for my attempt to eliminate Case that it does not postulate movement-driving features on both DPs and functional heads, but only on the latter.

<sup>14</sup>Examples of semantic case would be nouns bearing 'adverbial' cases like the instrumental or the locative. See McFadden (2001) for discussion of how to assimilate the behavior of inherent and semantic case-marked DPs to that of prepositional objects.

<sup>15</sup>At this point, this is a stipulation, but no more of a stipulation than to say that P (unlike V) can always assign Case.

In the second place, a DP which would otherwise raise to subject position is not forced to when a replacement is present to raise in its place. This is so for the associate of *there*-type expletives, and for both objects in passive double object constructions in Icelandic (from Freidin and Sprouse 1991):

- (13) a. Ég syndi henni bílinn.  
I-NOM showed her-DAT the-car-ACC  
'I showed her the car.'
- b. Bílinn var syndur henni.  
the-car-NOM was shown her-DAT  
'The car was shown to her.'
- c. Henni var syndur bílinn.  
her-DAT was shown the-car-NOM  
'She was shown the car.'

Example 13a is an active double object sentence, which can be passivized either as in 13b or 13c. One of the objects must raise to the vacated subject position, but it can be either one, while the other remains happily within the VP.<sup>16</sup> Again, this is unexpected if movement is driven by the need for DP-licensing. That is, if *bílinn* has to raise to subject to be licensed in 13b, how does it get away with not moving in 13c? Of course, a number of explanations for this type of behavior have been given, involving either mediated licensing through *there*-expletives or something like long-distance Agree. However, if DP-licensing plays no role in driving movement, such ad hoc mechanisms are unnecessary. Indeed, this pattern is precisely what the EPP predicts: some DP must appear in the relevant specifier position, but once one of them does so, all others are free to remain where they are.

In the third place, it seems that the only DPs that are *always* required to raise are underlying subjects. Even in non-finite clauses where no subject Case is at stake, subjects never remain VP-internal:<sup>17</sup>

- (14) a. \*...to John eat beans.  
b. ...John to eat beans.

Objects, on the other hand, frequently do remain VP-internal, like *beans* in

<sup>16</sup>That it is still within VP is shown by the fact that it follows both the inflected auxiliary and the passive participle.

<sup>17</sup>Similar data presented in 4 above could be accounted for by saying that OS is overt and obligatory in English ECM sentences, but the pattern exemplified by 14 generalizes to *for...to* infinitives as well, where there is no question of OS. Thanks to Tony Kroch for pointing out this argument.

14b above.<sup>18</sup> If the driving force for movement out of the VP is a DP's need for licensing, there is no reason why there should be an asymmetry between objects and subjects, since both should be equally in need of licensing from Case.<sup>19</sup> However, if it is the EPP that drives such movement, then the asymmetry is predicted. By relativized minimality, the highest DP will be the one to raise to satisfy the EPP, and this will always be the underlying subject if there is one. The underlying object will only raise when the absence of an underlying subject makes it the highest argument, as in passive and unaccusative constructions.

#### 4 What would we do without Case?

We thus have reason at a basic level to think that A-movement is driven by the needs of functional heads, not by licensing requirements on DPs. When we get down to the empirical details, however, we are left with a number of facts which Case has been instrumental in accounting for. If we want to eliminate Case from our theory of grammar, these facts will require new (and better) explanations. It is far from clear at this point whether that will be possible. It may well be that, the argumentation in the previous sections notwithstanding, syntactic Case does too much work for us to do without it. However, the previous sections should make us sufficiently suspicious of Case to justify a serious attempt to capture the relevant data in a different way. In this final section I will therefore review what I consider to be the two major empirical arguments in favor of Case and suggest how they might be dealt with differently.

The first argument comes from the fact that DPs are not allowed to undergo A-movement out of finite subject position, as in 15:<sup>20</sup>

<sup>18</sup>As mentioned above, Lasnik (2001) argues convincingly that if overt OS is possible in English, it is optional. That is, some objects do indeed remain VP-internal.

<sup>19</sup>This is what led to the postulation of AgrO beside AgrS in early versions of Minimalism. If subjects have to raise to get Case, then so should objects, since we have no reason to expect an asymmetry. The fact that objects do not appear to raise in English forced the assumption that movement to AgrO for Case-checking is at LF. Again, concerns of symmetry demanded this must be so for raising to AgrS as well, bringing us back to the conclusion that overt subject raising was to satisfy the EPP, and not for Case.

<sup>20</sup>It is typically claimed that A-movement is blocked out of Case positions in general, but this is too strong. I have argued above that movement out of object position is only blocked by the presence of a higher subject, not by the possibility of Case assignment in situ, and we know that movement out of PPs that otherwise seem to assign Case is possible under certain circumstances in English. This is in clear contrast to finite

- (15) \* John<sub>i</sub> seems [<sub>CP</sub> t<sub>i</sub> is sick.]  
 (16) [<sub>CP</sub> That John had the flu] was obvious.

This is typically captured by saying that once *John* checks off its Case feature in the subordinate clause it is barred from doing so in the matrix clause, but this movement can be blocked without reference to Case. I think the most promising possibility is a type of relativized minimality account. Given the possibility of 16, it would seem that finite clauses can be subjects, i.e. they can satisfy the EPP. If this is so, then movement of *John* to satisfy the EPP in 15 would be blocked because the clause is a closer potential satisfier. This follows straightforwardly if we adopt the traditional idea that clausal complements are essentially nominal structures.<sup>21,22</sup> An analysis of this sort has a crucial advantage over the one based on Case. As noted in footnote 20, the absolute restriction on A-movement only applies to finite subjects, not to objects. Under the Case-based account, this asymmetry is unexpected, and requires an additional explanation,<sup>23</sup> but under the RM account it is correctly predicted. Essentially, this says that A-movement is clause-bounded, and since the subject is the highest A-position in the clause, no further movement is possible from it, but movement from object position is fine as long as the subject posi-

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subject positions, from which A-movement *never* seems to be possible.

<sup>21</sup>See Rosenbaum (1967) for the classic exposition of this idea. Using updated terminology, in sentences like 16, the CP is embedded in a dummy DP which actually satisfies the EPP. Given such an analysis, the RM story is simple. To raise to subject position, the DP *John* in 15 would have to move past the CP and the dummy DP in which it is embedded, precisely the sort of configuration that RM is meant to rule out. Independent evidence in favor of the CP within DP analysis of finite subordinate clauses will be given below.

<sup>22</sup>This could also follow from Chomsky's (2000,2001) Phase Impenetrability Condition. If CP constitutes a phase, then it will be a barrier to A-movement, since neither position at its edge, i.e. C or Spec-CP, is an A-position. A-movement thus has no 'escape-hatch'. At some level, this says the same thing as the RM account: finite CP is a barrier to A-movement.

<sup>23</sup>Thus it is typically assumed that passive and unaccusative verbs fail to assign accusative Case, thus allowing/forcing their internal arguments to raise to subject position. This is frequently stated in the form of Burzio's Generalization (Burzio (1986)), by which internal Case assignment is dependent on the external  $\theta$ -role assignment. However, as Burzio (2000) has himself pointed out, BG was never an explanatory principle, but rather a descriptive generalization. Indeed, a serious stipulation was always required to connect internal Case to external  $\theta$ -role. Instead, Burzio (2000) endorses an account similar to the one here, where the EPP drives movement and BG is derived in the process.

tion above it is still open.

The second argument for the existence of Case comes from examples like 17a (taken from Martin (1999)):

- (17) a. \* It seems [<sub>IP</sub> several students to have been arrested.]  
 b. Several students<sub>i</sub> seem [<sub>IP</sub> t<sub>i</sub> to have been arrested.]  
 c. It seems [<sub>CP</sub> that several students have been arrested.]

The normal account of this sentence is that *several students* cannot check its Case feature, since non-finite T doesn't check Case, and *seem* is not an ECM verb. If we eliminate Case, we have a problem, because everything else seems to be fine: the EPP and  $\theta$ -criterion are satisfied in both clauses, and there is nothing wrong semantically. Looking for an alternative to Case, Marantz (1991/2000) argues that the problem with 17a is that the insertion of expletive *it* is illicit. The suggestion is that *it* can only be inserted as a last resort, when nothing else is able to satisfy the EPP. In 17b, *several students* is available to potentially satisfy the matrix EPP, but as noted above, such raising is blocked in 17c, so in such an instance (and only such an instance), expletive *it* comes to the rescue.

However, a serious difficulty for this approach is presented by the following alternation:

- (18) It seems clear [<sub>CP</sub> that John is sick.]  
 (19) [<sub>CP</sub> That John is sick] seems clear.

Given the possibility of raising the CP to satisfy the EPP in 19, insertion of *it* should be illicit in 18. Since 18 is clearly fine, insertion of expletive *it* cannot only be allowed as a last resort, and thus we cannot say that insertion of *it* in 17a is blocked by the possibility of raising *several students* as in 17b.

However, there is potentially a different problem with *it* in 17a. Above I suggested, following the traditional analysis in Rosenbaum (1967), that those types of clause from which A-movement is barred might actually have an underlying DP structure. In fact, these are precisely the same clause-types that can appear in subject position and that can be embedded in a clause with an expletive-*it* subject:

- (20) a. \* John<sub>i</sub> seems likely [that t<sub>i</sub> is sick]. (finite clauses)  
 b. [That John is sick] seems likely.  
 c. It seems likely [that John is sick].  
 (21) a. \* John<sub>i</sub> would be odd [for t<sub>i</sub> to be sick]. (*for...to* clauses)  
 b. [For John to be sick] would be odd.  
 c. It would be odd [for John to be sick].

- (22) a. \* PRO<sub>i</sub> would be odd [<sub>t<sub>i</sub></sub> to be sick]. (PRO clauses)  
 b. [PRO To be sick] would be odd.  
 c. It would be odd [<sub>t<sub>i</sub></sub> to be sick].
- (23) a. John<sub>i</sub> seems likely [<sub>t<sub>i</sub></sub> to be sick]. (raising verb complements)  
 b. \* [John to be sick] seems likely.  
 c. \* It seems likely [John to be sick].

This pattern can be explained if we adopt the hypothesis that the first three clause types above (but not the fourth) are in fact embedded in a dummy DP. This explains why they can appear as subjects and objects (cf. *I expect that John will be sick*). Furthermore, we can say that expletive *it* is simply how the dummy D head is spelled out when it is separated from the CP.<sup>24</sup> What rules out sentences like 17a and 23c is that the complement clause of a raising verb, not being embedded within a dummy DP, can never raise to subject position, as shown by 23b, and thus can never strand the dummy DP there to be spelled out as expletive *it*.

All of this amounts roughly to saying that the embedded clauses that appear in the c sentences above are the associates of expletive *it*. It should not be surprising, then, that just as expletive *there* places selectional restrictions on its DP associate, expletive *it* only works with certain clause-types. Note that this also allows us to explain a difference between *it*- and *there*-type expletives that otherwise must be stipulated. With *there*-type expletives it is the associate and not the expletive that controls verb agreement, while *it*-type expletives seem to control the agreement themselves. However, if expletive *it* has a clausal associate, then agreement is really always with the associate. It just so happens that all clauses are third person singular, giving the appearance that *it* is triggering agreement itself.

Clearly, a great deal of research is necessary to make the details of this analysis work. In particular, it will be necessary to flesh out the theory of the selection of subordinate clause types and expletive-associate relationships that is adopted above.<sup>25</sup> At this point it remains to be seen whether the traditional story as found in Rosenbaum (1967) can be translated into modern terms in a way that is attractive and can overcome the objections that led to its aban-

<sup>24</sup>Exactly how we would analyze this is an open question. Rosenbaum's analysis is that the CP can optionally extrapose. In other words, in both the b and c sentences above, the full DP raises to subject position, after which, only in the c examples, the embedded clause extraposes, leaving the DP essentially stranded. When it is stranded, the DP must be spelled out as *it*.

<sup>25</sup>For example, why is it that finite clauses, *for...to* infinitives and PRO infinitives can be embedded in dummy DPs while raising and ECM infinitives apparently cannot?

donment in favor of the Case-theoretic account in the first place. Until such time as this has been done, the solutions proposed in this final section must be regarded as speculative and somewhat stipulative (although perhaps no more so than the syntactic Case alternative). Thus I cannot yet say that I have eliminated the need for syntactic Case. Nevertheless, I have laid out in this paper just what is at stake in doing so and hope to have shown that such a move has better motivation than the frequent attempts to eliminate the EPP.

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