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# THE EXTERNAL OBJECT HYPOTHESIS AND THE CASE OF OBJECT EXPLETIVES<sup>1</sup>

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# 1 Introduction

Rosenbaum (1967) is, I believe, the first in the generative literature to carefully discuss the construction exemplified in (1) (examples from Pullum & Postal 1988).

Everyone would prefer it (for you) to come early
 I dislike it that he is so cruel
 I dislike it for him to be so cruel
 I dislike it very much that he is always late
 I didn't suspect it for a moment that you would fail
 They doubt it (very much) that you will go
 I regret it very much that we could not hire Mosconi
 I resent it greatly that you didn't call me
 I don't mind it very much that he did that

Its relevant properties are the appearance of an apparently expletive pronoun *it* in what appears to be object position, and a clausal constituent that would otherwise be the complement of the verb. The construction has been controversial because if the pronoun is indeed expletive and in object position then the basic assumption of transformational grammar in (2), that expletives cannot appear in subcategorized positions, is called into question (based on Chomsky 1981).

2. Expletives cannot appear in subcategorized positions

In fact Postal & Pullum (1988) argue that indeed this is the case. Some of their examples, and

<sup>1.</sup> The research for this paper began as collaborative work with Kimberly Abbott which was presented at the Annual Meeting of the Linguistic Society of America (1997). The current version is still a work in progress. I would like to thank Kim Abbott and Raúl Aranovich for discussion. Only I should be held responsible for the contents, though.

others, are exemplified in (3) (Postal & Pullum 1988: 643).

3. They never mentioned it to the candidate that the job was poorly paid We can take it for granted that there will be an appeal I have it on good authority that the CIA was never informed We demand it of our employees that they wear a tie Don't bruit it about that their marriage is on the rocks Don't spread it around that I'm giving you this assignment I blame it on you that we can't go They brought it to his attention that his daughter was sick

Postal & Pullum argue for (4), which essentially states that there are object expletives in English:

- 4. "An NP with the form *it* must be postulated that...
  - (a) is not assigned a è-role,
  - (b) meets all of our syntactic criteria for expletives, and
  - (c) is in a subcategorized position." (Postal & Pullum: 653)

Postal & Pullum provide examples like (5) and (6) to counter a "small clause" analysis, which would place *it* as the subject of a small clause, rather than as an object (Postal & Pullum: 644-5):

- 5. (a) They mentioned it immediately to the candidate that the job was poorly paid
  - (b) \*They mentioned immediately it to the candidate that the job was poorly paid
  - (a) I take it then that you won't be joining us
    - (b) \*I take then it that you won't be joining us

Both (5) and (6) show that main clause material can, and in fact must, follow the expletive pronoun, suggesting that the expletive is not a lower clause subject but is actually part of the main clause. Postal & Pullum conclude that the standard assumption in (2) must be abandoned.

Rothstein (1995) has a different take on the data in (1) and (3). She claims that these pronouns are thematic objects (not expletives) and are associated with the clausal constituents by predication and/or dislocation. Her view is consistent with the data in (5) and (6) since the pronouns are objects. Rothstein, then, argues that there are no object expletives, which means that (2) can be maintained.

My take on the controversial data in (1) and (3) is that it does not actually matter if these object pronouns are expletive or not because my account will be consistent with either outcome. However, I will turn now to further data that I believe involve objects which are uncontroversially expletive.

Rothstein does discuss another class of pronouns which she argues are expletive, but are not objects; these are in (7):

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6.

- 7. (a) I consider it (to be) obvious that you should have done that
  - (b) I prevented/kept it from being obvious that we were late

She follows Stowell (1983, 1991b) and assumes that these examples have a small clause structure as in (8):

- 8. (a)  $[V [NP XP]_{XP'}]_{VP}$ 
  - (b) [consider [it obvious that you should have done that]]

Her analysis claims that these expletives are "predicational subjects", not objects, and that there are no object expletives, thus maintaining (2).

Data from Postal & Pullum cast doubt on this conclusion. The examples in (9) involve particle verbs like *figure out* (Postal & Pullum: 646):

- 9. (a) I figured it out to be more than 3000 miles from here to Tulsa
  - (b) I *figured* it *out* to be impossible for us to get there by noon
  - (c) She *made* it *out* to be only 49% probable that we would get there on time
  - (d) He *reasoned* it *out* to be incorrect to make that assumption

What is relevant is that the expletive is between the main verb and its particle, suggesting that the expletive is in the main clause, and is an object. Rothstein suggests, however, that a particle movement rule accounts for this, perhaps at PF, so in her view the data in (9) do not threaten the claim in (2).

More data, based on Postal & Pullum and on Postal (1974), however, cannot be given such an explanation. In (10) the expletive appears between the main verb and other verbal material, like complements and adverbials. These examples are not amenable to a PF particle movement rule to explain the interpolation of the expletive with other main clause material.

- 10. (a) I can *prove* it *to your satisfaction* to be impossible to construct all the parse trees in polynomial time
  - (b) They *reported* it *to the chief* to be impossible to obtain useful concessions
  - (c) I finally *proved* it to Bob to be possible to teach X' Theory to undergrads
  - (d) I expected it, correctly, to be hard to teach that stuff
  - (e) I can *prove* it *easily* to be impossible to solve that problem

I believe that data like (10), and by extension (7) and (9), show that these expletive pronouns are indeed main clause objects. That is, Pullum & Postal's conclusions in (4) seem to be right for at least some examples. Does this mean that the claim in (2) must be abandoned? I will suggest that it need not be. I will begin by outlining some of my conclusions before turning to the arguments.

Postal & Pullum make the standard assumption that the surface object position in English is indeed its underlying subcategorized position. I disagree with this assumption. I argue for a

parallelism between subjects and objects. Since the mid-80's subjects have been assumed to be base-generated in a thematic, predicate-internal position and moved overtly to an external functional position for Case, which is Spec, AGRsP (or Spec, IP). This is known as the Internal Subject Hypothesis (ISH) (Koopman & Sportiche 1988, Kuroda 1985, Fukui & Speas 1986, Kitagawa 1985, among others).

Direct objects, I argue, are also base-generated in a thematic, predicate-internal position and moved overtly to an external functional position for Case, which is Spec,AGRoP. I will call this the External Object Hypothesis (EOH). Expletives, then, can appear in non-subcategorized, non-thematic positions, maintaining the claim in (2).

Surface subject position is a non-subcategorized position ideal for expletives. The EOH provides an identical position for object expletives. Rothstein's expletives in (7), and those in (9) and (10), are raised from embedded clauses, to main clause surface object position. The pronouns in (1) and (3), if expletive, are inserted directly into Spec,AGRoP, which is analogous to the treatment of subject expletives.<sup>2</sup>

My proposal rests on the External Object Hypothesis, the claim that the direct object (and main verb) in English moves to a VP-external functional position in the overt syntax. I turn now to arguing for the EOH.

#### 2 Verb and Object Position in English

#### 2.1 V external to VP-type constituent

Following Johnson (1991), Koizumi (1993) and Runner (1995, 1996, 1998), I argue that the main verb in English appears overtly in a position external to another VP-type constituent, as (11) schematizes:

<sup>2.</sup> Chomsky (1995), trying to characterize the distribution of expletives like *there*, argues that D features in T are what ultimately licenses expletive NPs. This may be correct for the expletive *there* (though see Runner 1998, chapter 8, for an alternative proposal). However, if the approach I am outlining here is correct, such an analysis will not be right for the expletive *it*. This is because there is no T node associated with AGRo, unlike the T node associated with AGRs. In fact, this fact may ultimately pave the way towards an analysis of why Spec,AGRs can directly host both *there* and *it*, while Spec,AGRo can directly host only *it* (without raising from an embedded Spec,AGRs). See the analysis in the text Section 3, below.

11.



There are several arguments for this. First, coordination examples like those in (12) involve conjuncts like [the book on the table], which is a VP-like constituent lacking a verb:

- 12. (a) Gary put [the book on the table] and [the lamp on the sofa]
  - (b) Chris ate [the meat slowly] but [the vegetables quickly]
  - (c) Sam talked [to Mittie yesterday] and [to Betsy the day before]

[Larson 1988]

The relevant coordinated conjunct is, e.g., [the book on the table], which looks like a constituent containing the complements of V without the verb itself. I take this as initial evidence for overt V raising to a position external to VP.

Second, Right-Node Raising (whatever its appropriate analysis) seems to target a VP-like constituent lacking a verb, as (13) shows:

- 13. (a) Smith loaned, and his widow later donated, [a valuable collection of manuscripts to the library]
  - (b) I borrowed, and my sister stole, [large sums of money from Chase Manhattan Bank]
  - (c) Leslie played, and Mary sang, [some Country & Western songs at George's party]
  - (d) Mary baked, and George frosted, [twenty cakes in less than an hour]

[Abbott 1976]

The right node constituent, e.g. [a valuable collection of manuscripts to the library], again appears to be a constituent containing the complements of V without the verb itself. I take this as further evidence that V raises to a position external to VP.

Third, Rochemont & Culicover (1990) argue that stylistic inversion examples like the one in (14) involve a fronted VP, lacking a verb:

14. They said John would walk into the room nude, and into the room nude John walked/walked John [Rochemont & Culicover 1990]

Once again, the fronted constituent, [into the room nude], contains the complements of V without the verb itself. Following Rochemont & Culicover I will take this as more evidence that V raises to a position outside of VP.

My first conclusion, then, is that V moves overtly out of a constituent containing the complements of V and other VP-related material. This is what the schema in (11) represents.

### 2.2 V and O external to VP-type constituent

There is also reason to believe that the object as well appears external to a VP-type constituent. (15) illustrates a more articulated version of (11):

15.



Coordination examples like those in (16) again point to a VP-like constituent this time lacking both verb and object:

- 16. (a) Marcia told the story [to Alice before breakfast] and [to Sam after dinner]
  - (b) I showed the office [to the prospective students during their interviews] and [to the faculty after cleaning it up]
  - (c) Ginger saw Mary Ann [in the park after dinner] and [at the dock around sunset]

[Runner 1998]

The coordinated conjunct, e.g. [to Alice before breakfast], looks like a constituent containing other VP material, without either the verb or the direct object NP. I take this as initial evidence that not only V, but also the direct object NP raises overtly out of VP to a VP-external position.

Right-Node Raising examples like (17) point in the same direction:

- 17. (a) Marcia told the story, and Alice explained the problem, [to Sam after dinner]
  - (b) I showed the office, and Mary showed the computer lab, [to the prospective students during their interviews]
  - (c) Ginger saw Mary Ann, and Thurston saw Lovey, [in the park after dinner]

[Runner 1998]

The right node constituent, e.g. [to Sam after dinner], again looks like a VP without the verb or the direct object NP. I take this as further evidence that both V and its direct object NP raise overtly out of VP to a VP-external position.

Third, recent work by Lasnik (1996, 1999) has also converged on the claim that objects move overtly for Case in English. He has exploited this claim in an analysis of pseudogapping (Lasnik 1996) and in an analysis of the binding possibilities in ECM constructions.

My second conclusion, then, is that both the main verb and direct object appear external to a VP-type constituent, as (15) schematizes. I now turn to my actual proposal, which fills in the details in (15).

#### 2.3 The Proposal

The tree in (18), which incorporates the External Object Hypothesis will form the basis for my explanation of the facts in Sections 2.1 and 2.2:

18.



The main verb moves overtly to F, the head of FP in (18). The object moves overtly to Spec, AGRoP, leaving other VP material behind. I leave open exactly what the label of FP is, perhaps ASPP or TP, but I note that it is higher than AGRoP, as shown in Section 2.1.<sup>3</sup>

The proposal outlined in (18) calls into question the analysis of the well-known differences between French and English verb movement (Emonds 1978, Pollock 1989). I will briefly address this issue here.

The basic analysis of verb movement in French and English argued for by Emonds (1976) and Pollock (1989) and adopted by Chomsky (1995, chapter 2) is that main verbs in French move overtly to a VP-external functional position while English main verbs remain in situ. This analysis is based in part on the assumption that certain adverbs are adjoined to VP in the two languages:

19. Jean embrasse souvent Marie (a) (b) DP verb [VP ADV [VP tV DP ]][French] 20. John often kisses Mary (a) DP [vp ADV [vp verb DP ]] (b)

http://www.ling.rochester.edu/wpls

263

[English]

<sup>3.</sup> I embed my analysis in the phrase structural proposal assumed in Chomsky 1995, Chapter 3. The text proposal can be modified straightforwardly to be consistent with the assumptions in Chomsky 1995, Chapter 4, by assuming that Spec, AGRo is Spec, vP and that in English there is overt V movement to a position external to vP and NP movement to Spec, vP.

My view of verb movement is that the French and English facts in (19) and (20) show that main V moves higher overtly in French than in English, but not that the verb does not move out of VP in English. My claim is that the adverbs in question are adjoined to a higher VP-external functional projection (FP).<sup>4</sup> F is the position to which the English verb overtly moves (as shown in tree (18), above):

| 21. | (a) | DP verb [ <sub>FP</sub> ADV [ <sub>FP</sub> t <sub>v</sub> [ <sub>AGRoP</sub> DP [VP]]]] | [French]  |
|-----|-----|--|-----------|
|     | (b) | DP [ <sub>FP</sub> ADV [ <sub>FP</sub> verb [ <sub>AGRoP</sub> DP [VP]]]]                | [English] |

Therefore, I agree that main verbs move higher in French than in English, but I disagree that this means that main verbs in English cannot move at all. I take the sorts of facts outlined in Sections 2.1 and 2.2 to be a challenge to this now standard assumption.

#### 2.4 Against a VP-Shell

Another structure consistent with the constituency argued for in Sections 2.1 and 2.2 is the VP-shell structure in (22), a version of Larson's (1988) proposal:

22.



I will provide one argument against (22) in favor of (18). The argument simply makes the point that the position the object sits in is functionally different from that of other VP complements.

As is well-known, adverbs can appear between the verb and its prepositional complement as in (23a), but not between the verb and its NP complement, as in (23b):

<sup>4.</sup> The position of negation with respect to V has also been used as an argument for lack of V movement in English. I assume that NEG appears (directly) above FP in both languages, again accounting for the difference in V placement in French and English. This also accounts for the NEG-ADV-V order found in English: *John does not often kiss Mary*.

- 23. (a) Sam talked (quietly) to Carol about Oliver
  - (b) Cindy showed (\*quietly) her book to the boys

To account for this, assuming the VP shell structure in (22), we need to derive a rather awkward generalization: the adverb can adjoin to  $VP_1$  if the first complement is PP, but it cannot adjoin to  $VP_1$  if the first complement is NP. Short of invoking Case-adjacency it is not clear how this generalization can be accounted for.

Assuming a tree like (18), with the object in Spec,AGRoP and the PP in VP, the generalization is a bit simpler: adverbs cannot adjoin to AGRoP. This restriction has independently been suggested by both Koizumi (1993) and Runner (1995, 1996, 1998), and is perhaps derivable from a version of Kayne's (1995) LCA, which rules out, in principle, adjunction to XPs with specifiers.

Notice that such adverbs can otherwise adjoin anywhere in VP, as (24) shows:

- 24. (a) ADV in VP:  $[_{VP}$  (quietly) to Carol (quietly) about Oliver (quietly)]
  - (b) \*ADV adjoined to AGRoP: showed [AGRoP (\*quietly) her book [VP (quietly) to the boys (quietly)]]

What I think this suggests is that the type of position the object is in is functionally different from the position the PP is in. Whatever the right account of the distribution of such adverbs ends up being, it seems that sensitivity to functional position is going to have to be incorporated into it.<sup>5</sup>

To summarize the argument thus far:

- (a) Constituency tests suggest that the object is external to a VP-type constituent.
- (b) Adverb placement suggests that the object position is functionally different from other VP positions.
- (c) Combined, (a) and (b) point towards a structure like (18), above.

This structure has a predicate-internal thematic object position and a VP-external Case position. That is, the surface object position is not its thematic or subcategorized position, which is the basic claim of the External Object Hypothesis. I now return to our object expletives.

# **3** Object Expletives Reconsidered

The account of object expletives that I propose assumes the EOH. That is, that there is a VPexternal functional specifier that object NPs surface in. Since expletives do not bear thematic roles, they will never appear in complement position, which is what (2), above is concerned with. The EOH provides a non-thematic object position for these expletives.

My account of examples like Rothstein's (25a) is illustrated in the tree in (25b):

<sup>5.</sup> See Potsdam (to appear) for a proposal of a theory of adverb placement in English.



(b)

[Rothstein, 525]



I propose a sort of "raising to object" account, extending the account of ECM constructions provided in Runner (1998). The expletive is generated as the subject of *to be obvious that you should have done that* in the lower clause. It raises overtly to the main clause surface object position: Spec,AGRoP.

This proposal allows both Postal & Pullum and Rothstein to be right: these expletives are (surface) objects, Postal & Pullum's claim, while still being (underlying, "predicational") subjects, which is Rothstein's claim.

The other examples from (9) and (10), above, can be treated in the same way:

- 26. (a) I figured it out to be more than 3000 miles from here to Tulsa
  - (b) ... [FP figure [AGRoP it [VP... out [AGRsP  $t_{it}$  to be 3000 miles from here to Tulsa]]]]
- 27. (a) I can *prove* it *to your satisfaction* to be impossible to construct all the parse trees in polynomial time
  - (b) ...[FP prove [AGRoP it [VP...to your satisfaction [AGRsP t<sub>it</sub> to be impossible to construct...]]]]

The expletives are generated in the lower clause and raised into the main clause Spec,AGRoP position. The surrounding matrix material is no longer unexpected or problematic.

Returning to the original examples in (1) and (3), there are two possibilities. If the pronouns are expletive (following Postal & Pullum), they can be inserted directly into the main clause Spec,AGRoP, again not violating the claim in (2); if they are not expletives (following Rothstein), they are simply generated as thematic objects in VP and raised to Spec,AGRoP, just like other object NPs:

- 28. (a) I dislike it that he is so cruel
  - (b) ...[FP dislike [ $_{AGRoP}$  it [ $_{VP}$ ...( $t_{it}$ )...[CP that he is so cruel]]]]

Either analysis is straightforwardly available, given the EOH. Thus, the EOH, independently supported by the arguments in Sections 2.1 and 2.2 above, finds further support since it allows for an analysis of the otherwise problematic examples from Section 1. The next section outlines an argument for why it is correct to link the exceptions to (2), above, to the EOH and not to some other unrelated characteristic of English.

### 4 Why a Case position?

The EOH claims that objects in English move to a VP-external functional specifier to get Case. The account of object expletives provided in Section 3 exploits this non-thematic position as the position hosting the object expletives illustrated in Section 1. This account was motivated in part by the desire to maintain (2), the claim that expletives never appear in subcategorized (thematic) positions. One question that arises is what the status of (2) is. The generalization (2) embodies is part of a larger one which excludes the presence of any sort of phrase in a subcategorized position that is not thematically related to the head associated with that position. That is, besides ruling out expletives in thematic positions, we want to rule out movement into thematic or subcategorized positions. Descriptively, we just don't find cases where expletives or non-thematic phrases appear as complements to lexical heads, so such cases need to be ruled out in principle. So, we want something like (2) to hold.

One might ask why this descriptive generalization seems to be so. In fact, the only apparent counterexamples to this claim are the case of "raising to object" and the case of object expletives. But given the EOH, these are not counterexamples since their analysis does not involve placing a non-thematic NP as a complement to a lexical head. In other words the EOH, then, seems to provide a potential escape hatch to the generalization expressed in (2). That is, if a head does have associated with it a non-thematic Case position then an apparent exception to (2) is available. Therefore we want to be cautious about providing such a position since the fact is violations to (2) are rare.

I believe that the EOH, combined with standard assumptions about Case-assignment, is sufficiently constrained to pave the way towards an account of this descriptive generalization. The fact is that only verbs, and specifically, a subset of verbs, allow apparent violations to (2). No noun, preposition, or adjective allows such apparent violations. That is, there are no, e.g., noun object expletives. Thus, the escape hatch provided for (2) must be constrained enough to explain why only certain verbs, and no other lexical category, allow for the apparent violation of (2).

The heart of the analysis of object expletives provided above is the EOH. The EOH is simply the claim that direct objects appear in a special Case position for Case-licensing. That is, the escape hatch that the EOH provides is part of Case theory. Only V, and only a subset of V, provides a Case feature to be checked against a noun phrase for Case-licensing via Spec-head agreement with AGR (or some other functional head, see footnote 1). It is standardly assumed that P assigns Case differently from V and that N and A do not directly assign Case at all. If V is the only lexical head that assigns Case via something like the EOH then we have an explanation for why only with V do

apparent exceptions to (2) appear. Crucially, this explanation rests on the EOH.

# 5 Conclusion

The External Object Hypothesis, which claims that direct objects in English are parallel to subjects in having a VP-internal thematic position and a VP-external Case position which they appear in overtly, provides a straightforward account of the otherwise problematic object expletive construction discussed in Rosenbaum (1967), Pullum & Postal (1989) and Rothstein (1995). It also paves the way towards a new analysis of the fact that verbs and only certain verbs allow for such object expletives.

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| Katherine M. Crosswhite and James S. Magnuson, Editors<br>Joyce Mary McDonough, Series Editor       |           |
|---|-----------|
| Jean Ann and Long Peng: Optimality and Opposed Handshapes in Taiwan Sign Language                   | 173 - 194 |
| Joyce Mary McDonough: How to use Young and Morgan's The Navajo Language                             | 195 - 214 |
| Bob McMurray, Michael Spivey, and Richard Aslin:  |           |
| The Perception of Consonants by Adults and Infants: Categorical or Categorized? Preliminary Results | 215 - 256 |
| Jeffrey T. Runner: The External Object Hypothesis and the Case of Object Expletives                 | 257 - 269 |