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REMARK

Experiencer intervention in English *tough* movement: Evidence from extraction of the *tough* adjective against syntactic- and semantic-intervention accounts

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Abstract

It was first observed over a decade ago that the presence of experiencers leads to degradation in English *tough* movement. In the literature, this has been linked to either syntactic or semantic intervention. I will show that a crucial piece of data has been ignored in this debate, the possibility of extracting the *tough* adjective without the nonfinite CP. Under previous approaches, this seems to require extraposition of the CP. However, once extraposition is possible, the intervention configuration can no longer be prevented. I will argue instead that the restrictions on experiencer placement can be accounted for if the nonfinite CP is instead projected as an external argument and if null-operator clauses of this type cannot be extraposed. The "intervention" effect thus turns out to be completely unrelated to intervention but rather follows from basic word-order properties of the language.

KEYWORDS

tough movement, intervention effects, English, experiencers, extraposition, argument structure

1 | INTRODUCTION

Hartman 2011a was the first to notice that the presence of experiencers affects the acceptability of *tough* movement (TM) in that some placement options lead to ungrammaticality. While Hartmann analyzed this as a case of syntactic intervention, more recent work, Keine & Poole 2017, reanalyzes the facts in terms of semantic intervention. I will show in this article that neither approach is promising because an important piece of data has been neglected in the discussion, the possibility of extracting the TM adjective without the nonfinite CP. Under previous approaches, this seems to require extraposition of the CP. However, it can be shown that once extraposition is possible, the intervention configuration can no longer be prevented. I will argue instead that the restrictions on experiencer placement have nothing to do with "intervention" but follow from independent word-order properties of the language. Concretely, the restrictions on experiencer placement can be accounted for if the nonfinite CP is projected as an external argument (cf. Longenbaugh 2016) and if null-operator clauses of this type cannot be extraposed (cf. Bruening 2014).

This remark is structured as follows. In section 2, I will briefly summarize previous work dealing with restrictions on experiencer placement in TM. In section 3, I will introduce the empirical challenge: extraction of the TM predicate to the exclusion of the nonfinite CP. In section 4, I present my proposal. Section 5 provides further discussion and concludes.

2 | INTERVENTION IN ENGLISH TM

In this section, I will introduce the basic intervention data and the most prominent explanations that have been proposed for them. These accounts either involve intervention—syntactic or semantic—or relate the restrictions to constraints on extraposition.

2.1 | Restrictions on experiencers in *tough* movement as defective intervention

An influential paper, Hartman 2011a, observed that the presence of experiencers leads to degradation in English TM but not in the expletive construction:

(1) a. It is important (to Mary) to avoid cholesterol. Expletive construction
b. Cholesterol$_1$ is important (*to Mary) to avoid $\_\__1$. TM

(2) a. It was very hard (on me) to give up sugar. Expletive construction
b. Sugar$_1$ was very hard (*on me) to give up $\_\__1$. TM

Hartman proposed that this effect should be understood in terms of defective intervention: A movement across the experiencer is blocked by Relativized Minimality, like in Romance languages, where raising across an experiencer leads to ungrammaticality. The concrete analysis involves two movement steps, as indicated in (3). First, there is an A′-movement step up to the edge of the embedded CP (to account for the well-known movement effects in English TM such as parasitic-gap licensing). Then, there is A movement from within the nonfinite CP

to the matrix subject position. It is this movement step that is blocked in the presence of an experiencer.[1]

(3) Cholesterol$_1$ is important (*to Mary) [__$_1$ PRO to avoid __$_1$].

Further support for an intervention account comes from the observation that the effect disappears if the experiencer is topicalized, as in (4a) (Hartman 2011b: 125), or occurs to the right, as in (4b) (Keine & Poole 2017: 322; cf. also Lasnik & Fiengo 1974: 549).

(4) a. To Mary, cholesterol$_1$ is important to avoid __$_1$.
b. Cholesterol$_1$ is important to avoid __$_1$ to Mary.

Since, in (4), A movement targets a position below the experiencer, there is no intervention. The English facts thus seem quite parallel to experiencer-intervention data in Icelandic and Romance (see Hartman 2011b: 123–124). No restrictions regarding the positioning of the experiencer obtain in the expletive construction since no A movement is involved and consequently no intervention effect could ever arise.

While the logic of the argument is intriguing, it was quickly noticed that an intervention account faces serious difficulties. First, experiencers do not intervene in English raising, an uncontroversial case of A movement from the embedded clause (Hartman 2011b: 121):

(5) John$_1$ seems to Mary __$_1$ to be happy.

[1]The intervention effect had been overlooked because experiencers are normally introduced by *for*, which, however, is ambiguous between a preposition and a prepositional complementizer introducing nonfinite clauses. It is shown in Hartman 2011a that while both options are available in the expletive construction, in TM only the interpretation as a prepositional complementizer is available. This means that what looks like a PP experiencer in well-formed examples like (i) does not in fact involve an experiencer at all (as shown by the fact that the quantifier can only take narrow scope with respect to the matrix predicate).

(i) This test is impossible for every student to fail.

By using prepositions that are not similarly ambiguous, this confound can be avoided. For further arguments that *for* in TM does not introduce an experiencer, see Keine & Poole 2017: 301–304. For a rather different view, see Longenbaugh 2016: (9)–(18).

There is some controversy about exactly which PPs intervene. For instance, Keine & Poole (p. 312) present the following as fully grammatical and argue that the PP in such sentences is introduced differently than other PPs (specifically, that it is introduced as an argument/complement of A).

(ii) [These traffic cones] are damaging [to cars] to drive over __.

I have found it difficult to corroborate this judgment, though. Longenbaugh, meanwhile, points out that TM is possible with *foolish*-type adjectives:

(iii) [That statement] was foolish [of Don] to make __.

These do indeed seem to behave differently. (Longenbaugh assigns them an unaccusative structure, unlike the structure he assigns to the other TM predicates; see section 4. For a proposal that, on the contrary, treats the CP argument of *foolish*-type adjectives as external, see Stowell 1991: 122.) To simplify the discussion, I will set both types of examples aside, simply noting that they will arguably require a different treatment from what is proposed in this article.

Second, as Bruening 2014: 710 shows, placing adjuncts in the same postadjectival position as experiencers surprisingly leads to degradation in TM as well (a fact that also holds for TM in Romance languages): compare the expletive construction in (6a) to (6b). Crucially, though, adjuncts do not interfere in normal raising constructions, as (6c) illustrates.

(6) a. It is always annoying (at meetings) to talk about the budget.
b. The budget$_1$ is always annoying (*at meetings) to talk about __$_1$.
c. John$_1$ seemed (at the meeting) __$_1$ to be agitated.

This strongly suggests that Relativized Minimality cannot be at stake (adjuncts should not interfere with A movement). Bruening furthermore claims (pp. 708–709) that the intervention effect also vanishes if the PP occurs to the left of the TM adjective but below the putative landing site of A movement, as in (7). (See also Levine & Hukari 2006: 345; not all speakers seem to accept such examples, though.)

(7) ?Cholesterol$_1$ is to Mary important to avoid __$_1$.

On the defective-intervention account, the example in (7) should be just as ungrammatical as (1b), contrary to fact.

As a consequence, this account has been given up. In the next subsection, I will discuss a prominent reanalysis in terms of type mismatch.

2.2 | Intervention as the result of a type mismatch

A different explanation of the "intervention" effect is proposed in Keine & Poole 2017, namely that it results from a type mismatch.

An important component of Keine & Poole's analysis is the assumption that the semantic types of both the nonfinite CP and the adjective differ in the expletive and TM variants:

(8) a. Expletive construction
CP = st (propositional); adjective = ⟨st, st⟩
b. TM
CP = ⟨e, st⟩ (predicative/property); adjective = ⟨⟨e, st⟩, ⟨e, st⟩⟩

The experiencer is introduced by a functional head Exp, which combines with propositions only:

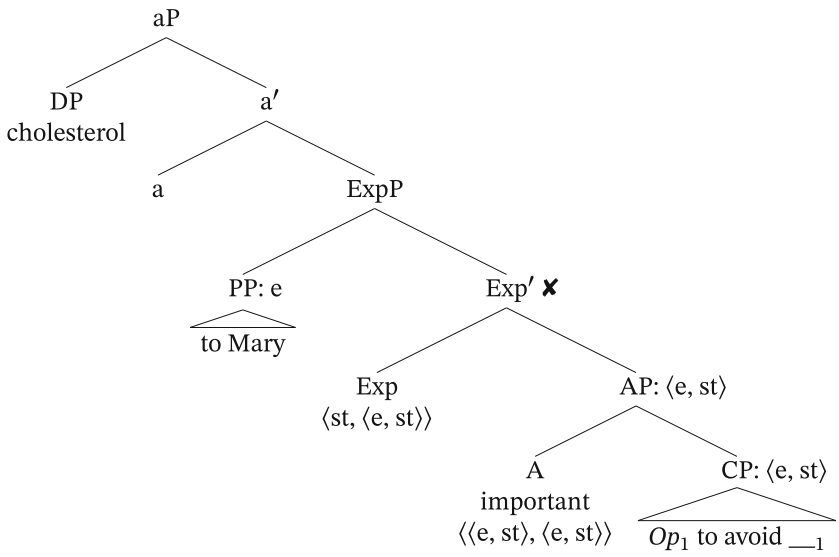
(9) Exp = ⟨st, ⟨e, st⟩⟩; PP = e

The derivation of the expletive construction is unproblematic: the adjective combines with the propositional CP and returns a proposition. Then, Exp and the experiencer can be merged; finally, the adjective moves across the experiencer to a higher functional head, a, to derive the surface order *it*–A–PP–CP.

In the TM derivation, the CP is predicative (because of operator movement) and thus combines with the predicative version of the adjective, which leads to a complex predicate. The TM subject then satisfies this predicate.

The degradedness that results from the presence of the experiencer in TM is related to a type mismatch. Since the combination of the adjective and the CP leads to a predicate, combination with Exp is blocked: by assumption, Exp can only be combined with propositions. The derivation thus crashes in the semantics:

(10)



The adjunct-"intervention" effect in (6b) receives the same explanation: assuming that adjuncts only combine with propositions, they cannot be introduced between the predicative adjective and the TM subject. The cases where intervention is voided (see (4) and (7)) can be accounted for by assuming that in those cases the experiencer is introduced after/higher than the TM subject, specifically, right above aP or in topicalized/extraposed position. Given that aP is propositional in that case, nothing blocks the introduction of the experiencer.

This is surely an elegant reanalysis that avoids the pitfalls of the syntactic-intervention account.[2] In the next subsection, I will discuss an alternative that relates the data to a constraint on extraposition.

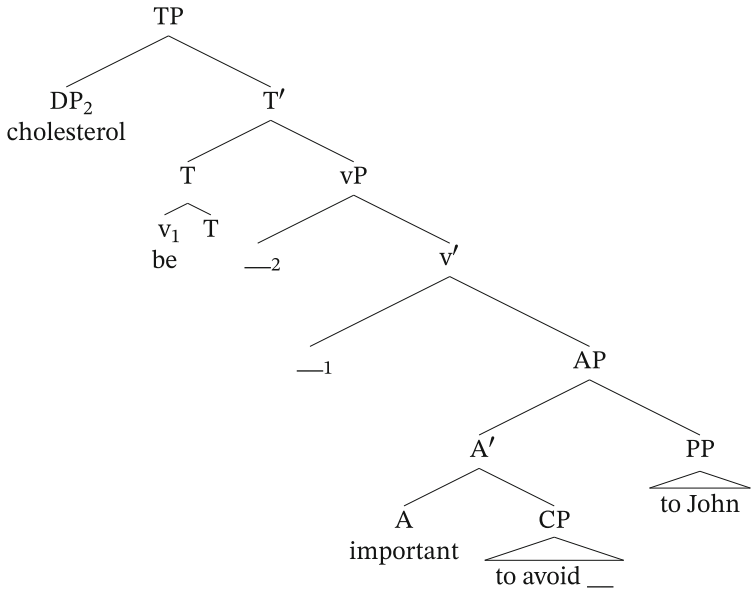
2.3 | "Intervention" follows from basic word-order properties

A very different account for the restrictions on experiencers in TM is proposed in Bruening 2014. Bruening argues that the restrictions simply fall out from basic word-order properties of English.

[2]One may object, of course, that the analysis crucially relies on the assumption that while CP and adjective can be of different types, the experiencer head cannot. If there were a second version of Exp that combined with predicates, nothing would block it in TM.

Bruening seems to assume (he does not say so explicitly) that the base order is [A–CP]–PP (or perhaps PP–[A–CP]):

(11)



The order A–PP–CP would consequently require extraposition of the CP. Bruening proposes that extraposition is impossible with this kind of null-operator construction. [3] If so, then the PP can only occur, as shown in (12), at the end of AP (if projected as a right-hand specifier as in (11)), at the beginning of AP (if projected as a left-hand specifier), or in topicalized position. Crucially, it cannot occur between the adjective and the CP.

(12) (To John,) cholesterol is (?to John) important (*to John) to avoid (to John).

The intervention configuration thus cannot be generated. (Bruening remains agnostic about the relationship between the TM subject and the gap.)

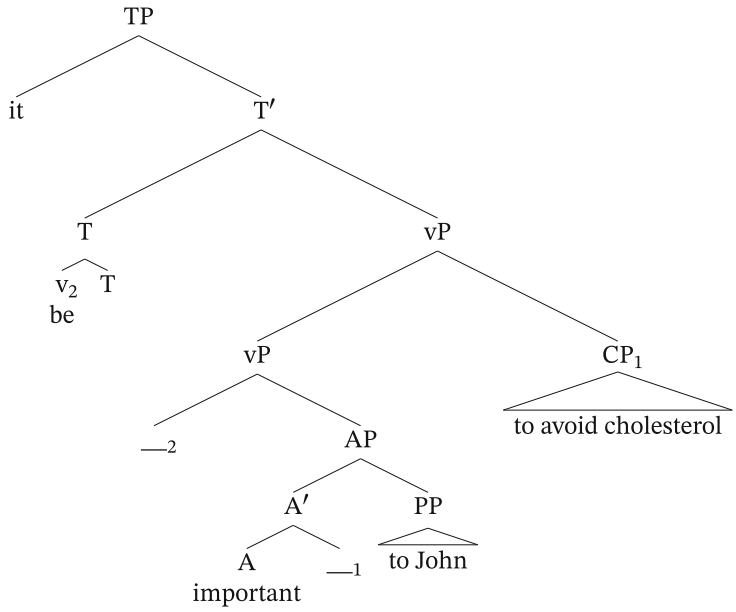
The adjunct-intervention facts follow under the standard assumption that adjuncts have to be introduced after the adjective has merged with its CP complement and normally can only be adjoined to maximal projections. Thus, they could only be adjoined to AP or vP and therefore simply cannot occur between A and CP.

In the expletive construction, on the other hand, no operator movement is involved, and so nothing blocks CP extraposition. The PP therefore can occur after the CP (without extraposition),

[3]While Bruening 2014 does not address this, for the extraposition restriction to make the correct empirical cut, it must be assumed that it does not extend to all null-operator constructions but only to those with a silent C. Thus, it does not block extraposition of *that* relative clauses or parasitic gaps where there is an overt P/C. In section 4.2.1, I will address extraposition in contact relatives, nominal TM constructions (*a tough nut to crack*), and gapped degree phrases (*Kittens are too cute to resist*), as well as (in footnote 13) possible sources for the extraposition restriction.

before the CP (under extraposition), before the AP (if projected as a left-hand specifier), or in topicalized position. The following structure illustrates the order A–PP–CP.

(13)



Adjuncts, similarly, can occur between A and CP if the CP is extraposed to some position above the adjunction site of the adjunct, for example, to vP.

Bruening's account of the restrictions on the placement of experiencers in TM is thus very different from that of Hartman 2011a and Keine & Poole 2017 but ingeniously simple. In the next section, I will discuss an aspect of TM that is problematic for all accounts of the intervention effect discussed so far.

3 | THE CHALLENGE: EXTRACTION OF THE TM ADJECTIVE

There is an empirical fact that is by no means new but that has crucially been neglected in this discussion: it is possible, as shown in (14), to extract the adjective to the exclusion of the CP (see Rezac 2006: 293, based on Heycock 1994: 257–258; see also Higgins 1973: 77, Nanni 1980: 577).[4]

(14) [How difficult] is Janice [to forget __]?

[4]Cases of such extraction can also be found with *though* inversion. Searches via Google or in the iWeb corpus (https://www.english-corpora.org/iweb/) return hits like *tough though he is to work for* and *hard/difficult though that is to believe*.

In addition, according to Rezac 2006: 293, the adjective may pied-pipe an experiencer:[5]

(15) [How difficult for George] is Janice [to forget __]?

A priori, data like (14) and (15) suggest an analysis where the CP first undergoes extraposition, followed by remnant-AP movement (similar to the derivation of *How likely is John to win?*). To make this more transparent, it is worth looking at assumptions about the base structure of TM predicates. It is usually presupposed that TM predicates are unaccusative; the CP is thus introduced as a complement and the experiencer as a specifier, which, depending on the approach, will be to the left (Keine & Poole 2017) or to the right (Rezac 2006, Bruening 2014):

(16) a. $[_{AP}$ PP $[_{A'}$ A CP]]
b. $[_{AP}$ $[_{A'}$ A CP] PP]

On this basis, a remnant-movement derivation of (15) would arguably look as follows. (The full derivation might be more complex than what is shown here. I also treat *how difficult* as an AP rather than a DegP for the time being, for ease of representation; cf. (43) in section 4.2.1.)

[5]For reasons that are not fully clear to me, not all speakers judge examples with PP pied-piping like (15) as completely grammatical; acceptance seems higher with *for* experiencers than with *on* or *to* experiencers. The latter, to the extent that they are grammatical, argue against the claim in Levine & Hukari 2006 that all PPs in TM should be analyzed as adverbial (given that certain predicates specifically select *to* or *on*); see also footnote 7.

One of the reviewers proposes that the fact that only *for* seems fully acceptable with AP movement suggests instead that *for* is a complementizer and that part of the *for* CP has been extraposed before the AP undergoes remnant movement. This would be a reanalysis parallel to the reanalysis of raising to object in Neeleman & Payne 2020. The proposed reanalysis is tantalizing. It does clash with Bruening's claim (discussed in section 2.3 and further pursued in section 4.2.1: see especially the observation in (30) and (31)) that extraposition of the null-operator CP in TM is impossible—but since, under the reanalysis, what would be extraposed would be the TP of the null-operator CP, it could still pattern differently (specifically by not being subject to the extraposition restriction).

However, to the best of my knowledge, the TP of *for*-CP complements, such as the *for*-CP complement in (ia), cannot independently undergo extraposition, as in (ic); only the entire CP can, as in (ib).

(i) a. I had hoped [for him to win] with all my heart.
b. I had hoped $\_\__1$ with all my heart [for him to win]$_1$.
c. *I had hoped [for him $\_\__1$] with all my heart [to win]$_1$.

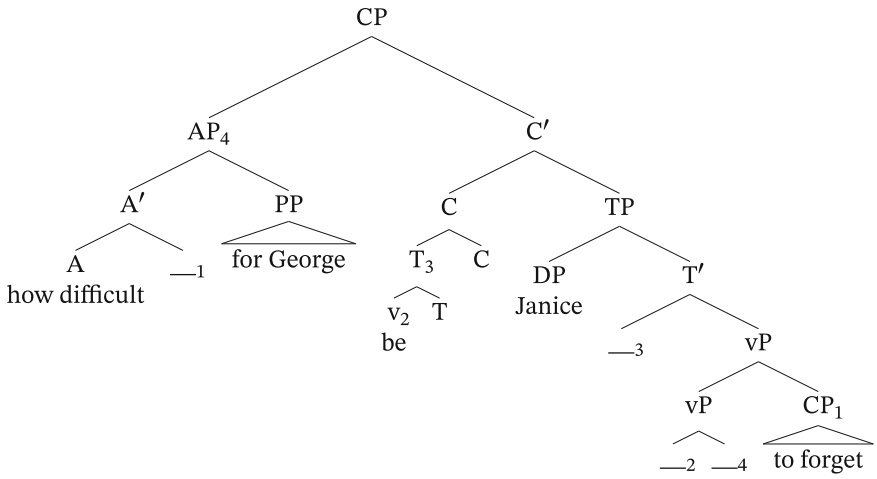
Another argument against the reanalysis comes from the meaning (to the extent that pied-piping is possible) of the AP-movement example in (ii), where the quantifier clearly cannot take scope under the TM predicate. The sentence is a question about the difficulty for each student, not a question about the likelihood that the test will in general be difficult to pass:

(ii) [How difficult for every/each student] is this test to pass?

Thus, while intriguing, the reanalysis ultimately seems unlikely. Note also that there are cases of AP movement where an experiencer *for* PP occurs in extraposed position (see footnote 12), showing that not all instances of *for* can be complementizers. The same is shown by examples where the *for* PP is fronted (see, e.g., topicalization as in *For George, Janice is difficult to forget* and the *wh*-movement example in footnote 7 below).

Let me also emphasize that the acceptability of the cases where the adjective pied-pipes the PP is ultimately orthogonal to the argument made below against previous accounts: all that matters is that AP can be moved without the CP, because that implies extraposition under the constituency assumed in previous work.

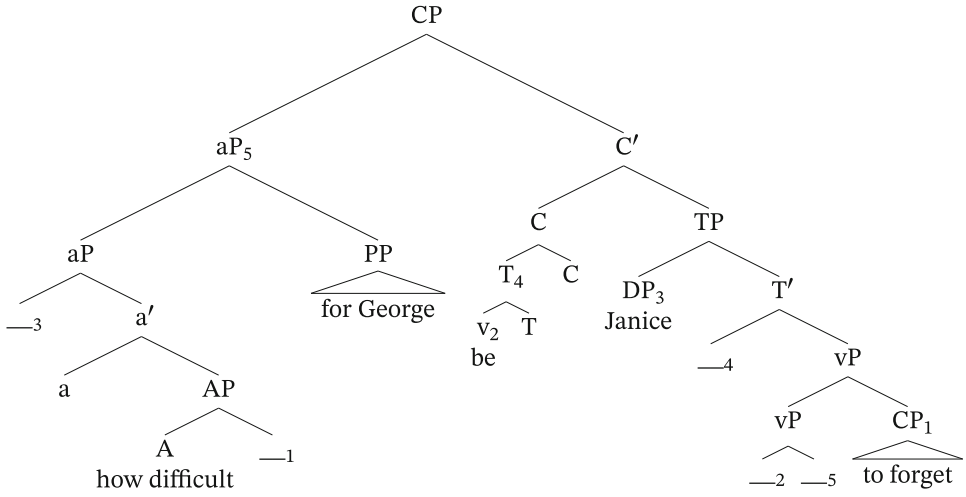
(17)



However, such a derivation actually involves the intervention configuration, in that the PP is structurally introduced between the adjective and the surface position of the TM subject. Consequently, examples like (15) are predicted to be ungrammatical under either the assumptions in Hartman 2011a or those in Keine & Poole 2017: either the TM subject—which is represented in (17) only as occupying spec,TP, to remain neutral about how it has gotten there—has A moved from the embedded CP across the experiencer, violating Relativized Minimality, or the experiencer is merged with the predicative version of the TM adjective, leading to a type mismatch.

This conclusion can perhaps be avoided if the PP is actually introduced slightly higher, right above the TM subject:

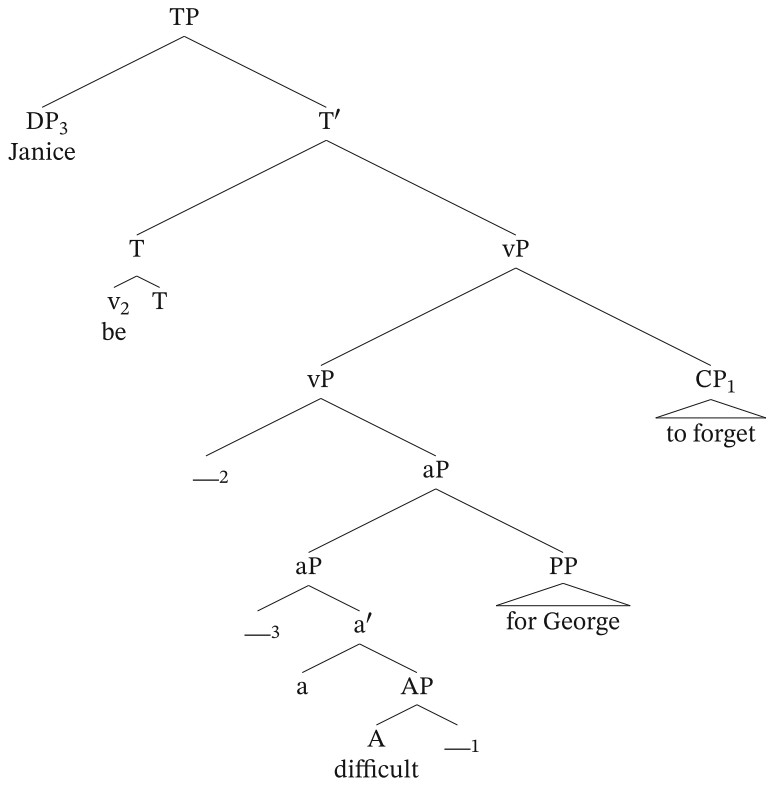
(18)



At least under the assumptions in Keine & Poole 2017, no degradation is expected here since after introduction of the TM subject in spec,aP a proposition obtains to which the experiencer can then be attached. However, while this can explain why (15) is just as grammatical as (14), it undermines the account of the intervention effect when there is no AP extraction. If high

attachment of the PP and CP extraposition are both, in principle, always available, it should be possible to create the ungrammatical surface string without incurring a type mismatch, as in (19): the PP would again be introduced above the TM subject, thereby avoiding a type mismatch, and then the CP would undergo extraposition and attach to some verbal constituent. This would derive the surface string A–PP–CP and thus the ungrammatical intervention configuration in (1b) and (2b).[6]

(19)



Thus, a coherent analysis within the assumptions of Hartman 2011a and Keine & Poole 2017 that accounts for both the intervention effect and the possibility of AP fronting does not seem to be available.

Under Bruening 2014's assumptions neither (14) nor (15) can be generated since AP movement to the exclusion of the CP is impossible if extraposition is not an option (and if the adjective takes the CP as its complement). Thus, while Bruening has a simple account of the basic intervention data in (1b) and (2b) and the nonintervention data in (4) and (7), the AP-movement data show that the account is incomplete. It seems that—under all three approaches discussed here, in fact—one would have to stipulate that CP extraposition is only possible under AP movement. This is obviously not a very promising solution, which is why I will not consider it any further.

[6]Let me stress again that the problem crucially also arises if speakers—for whatever reason—do not fully accept pied-piping of the experiencer under AP movement. The grammaticality of (14) is beyond doubt. Since this implies CP extraposition under these approaches, the derivation in (19) should always be available.

In the next section, I will sketch an alternative that brings together separate ideas from the previous literature to account for the intervention effect.[7]

4 | PROPOSAL

I will propose an alternative account of the "intervention" effect that adopts insights from Bruening 2014 and Longenbaugh 2016. First, the base structure of TM adjectives is different from what has generally been assumed in the literature: as Longenbaugh proposes, the CP is projected as an external argument. Second, extraposition of (certain) null-operator CPs is impossible, as Bruening proposes (recall the discussion in section 2.3).

4.1 | The CP as an external argument

As for the argument-structural aspect, in accord with Longenbaugh 2016, TM adjectives will not be treated as unaccusative but as unergative, with the CP subject merged as an external argument (projected in a distinct layer, aP) and the PP experiencer merged as an internal argument:[8]

[7]Another important piece of data for the intervention debate is the fact that PPs present in TM can undergo movement (Heycock 1994: 258):

(i) [For whom] were those papers tough to grade?

Levine & Hukari 2006: 359 argues that such data do not necessarily indicate that the PP has to have moved from within the matrix clause; instead, the PP could be generated in a higher, adjoined position (something that Keine & Poole 2017 would have to assume, too, to avoid a type mismatch). Rezac 2006: 292, however, provides reconstruction data suggesting that the PP must have originated close to the adjective. Furthermore, since different adjectives select different prepositions for the experiencer (*on*, *to*, *for*), it seems independently necessary to merge the PP with the adjective. Data like (i) are thus surely relevant for the intervention debate and favor the account to be introduced in the next section, where the PP is directly merged with the adjective.

[8]The argument that the reverse hierarchy is needed to ensure control of the PRO within the CP by the experiencer (Rezac 2006: 293) can be shown to be inconclusive.

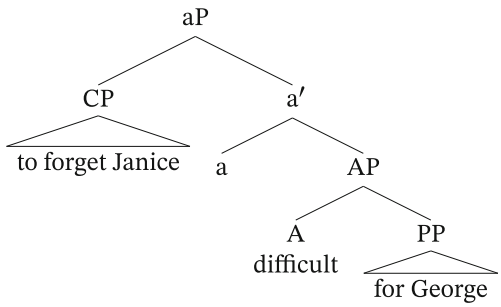
First, it has been argued, for example in Landau 2001: 123, 138, 143, fn. 17, that obligatory control does not require c-command between controller and PRO. Rather, the controller and the clause containing the PRO must be coarguments, and the CP must be interpreted within vP. Obligatory control between an object in VP and a subject infinitive in spec,vP is thus taken to be possible, as in (i) (the assumption being that the CP is interpreted in spec,vP rather than in its extraposed position; see Landau 2001: 127).

(i) It helped John$_i$ PRO$_i$ to buy himself$_i$ a new computer.

Second, experiencers display special control properties quite generally: even if they do not occupy the subject position in overt syntax, they behave like surface subjects with respect to adjunct control (see Landau 2010: chap. 8). This has been linked to LF raising of experiencers.

The predicates occurring in TM are particularly interesting since their behavior in super-equi constructions differs from that of other experiencer verbs. Normally, experiencer verbs like *please* require obligatory control (by the experiencer) if the nonfinite CP is to the right (extraposed), unlike nonexperiencer verbs (like *help*), as illustrated by the contrast between (iia, b). However, with the nonfinite CP in intraposed position (specifically, spec,TP), long-distance control is permitted as well, as (iic) illustrates (see Landau 2010: 102–105; nonexperiencer predicates allow both antecedents in both configurations; Landau assumes that the infinitive originates as an external argument in both cases but that LF raising of the experiencer in (iia) leads to obligatory control).

(20)



Arguments in favor of the CP being projected as an external argument are of different types. Some of them are based on thematic considerations. A nonexperiencer argument of an experiencer predicate can be either a subject-matter argument or a causer (Pesetsky 1995, Hartman 2012: 14–30). The following pair illustrates the difference.

(21) a. John is confident that Mary left. Subject matter
b. John is sad that Mary left. Causer

Only in (21b) is the mental state of the experiencer caused by the CP argument. Causers are often assumed to be projected above experiencers (see, e.g., Hartman 2012: 115–118).

Applying this to TM predicates, it is quite clear from their meaning that many TM predicates taking *to* or *on* experiencers also select a causer argument:

(22) a. It was hard/easy/tough/difficult on me to avoid sugar.
b. It was annoying/frustrating/enjoyable to me to attend this lecture.

As discussed in Longenbaugh 2016, many of these predicates pass a frequently employed diagnostic for causers, namely, the causative paraphrase:

(23) a. Avoiding sugar caused me hardship/difficulty.
b. Attending this lecture caused me annoyance/frustration/enjoyment.

(ii) a. Mary thought that it pleased John [PRO to speak his/*her mind].
b. Mary thought that it helped John [PRO to speak his/her mind].
c. Mary thought that [PRO to speak his/her mind] would please/help John.

Interestingly, unlike with the experiencer predicate in (iic), intraposed CP subjects of TM predicates require obligatory control, as (iiia) illustrates; and crucially, nonlocal control remains ungrammatical even when the null subject of the gerund is replaced by an overt pronoun, as in (iiib) (see Landau 2001: 136–137, Landau 2013: 41).

(iii) a. Mary$_i$ thought that [PRO$_{*i/j/*arb}$ solving the problem by himself/*herself/*oneself] would be easy/difficult for Peter$_j$.
b. *Mary$_i$ thought that [her solving the problem by herself$_i$] would be easy/difficult for Peter$_j$.

According to Landau 2013, the pattern in (iii) would be unusual for obligatory control. Landau suggests instead that control with TM predicates should be handled semantically. Consequently, given the special control properties of TM predicates, there is no reason to assume that the experiencer in TM actually has to c-command the PRO at any stage of the derivation (although LF raising could achieve that); its projection below the nonfinite CP is thus not problematic.

(Note that this test is dependent on a corresponding noun being available; with many adjectives, the *make* paraphrase is also a possibility: *That Mary left made me sad*.) Predicates taking subject-matter arguments do not allow the causative paraphrase: (21a) cannot be paraphrased by means of *That Mary left gives John confidence*.[9]

Other arguments in favor of the unergative nature of TM predicates are based on the diagnostics discussed in Cinque 1989, Cinque 1990a, and Bennis 2000 for distinguishing between unergative and unaccusative adjectives in Italian and German/Dutch. It is shown in those works that there are systematic asymmetries with respect to *ne* cliticization, embedded V2, the optionality of expletive subjects, extraction, anaphor binding, and *as* parentheticals. Unfortunately, most of these diagnostics, for independent reasons, cannot easily be applied to English. The clearest results obtain with *as* parentheticals.[10] It can be shown that the gap inside the parenthetical has to correspond to the position of a CP object. This holds for both verbal and adjectival predicates (see Cinque 1989: 91–92):

(24) a. As I said __, he will not come.
b. *As __ demonstrates his innocence, John was abroad.
c. As is well known __, John has won the prize.
d. *As __ is surprising, Mary has not yet left.
e. As is already clear __ to everybody, Mario will not make it.
f. *As __ is risky, Gianni will visit him.

TM adjectives behave like unergative adjectives in this respect, as (25) illustrates: they are not compatible with *as* parentheticals.

[9]Longenbaugh 2016 argues that TM predicates pass another test for causerhood, namely, the impossibility of nominalization as in the following.

(i) *my hardship/difficulty/annoyance/frustration to attend lectures

Longenbaugh contrasts this with the ability of noncausers to undergo nominalization as in *my confidence that …* However, the argument is confounded in that only structurally case-marked arguments can become a possessor in a nominalization, which thus independently seems to rule out the example in (i) given that the experiencer is expressed as a PP in TM. It remains true, though, that nominalizations like *annoyance* lose the causative component: see, for example, Pesetsky 1995.

Landau 1999: 347 also classifies *for* PPs as experiencers and treats the CP complement as a causer, even though the causative paraphrase does not work for all predicates (consider, e.g., *for* PPs occurring with *easy*, *important*, *impossible*) and *for* PPs do not always seem to be interpreted as proper experiencers (see also Longenbaugh 2016 and Keine & Poole 2017; the latter instead speaks of *judges*).

[10]English has neither *ne* cliticization, embedded V2, nor optionality of *it* with subject clauses in postverbal position.

Cinque 1990a: 10, fn. 10 demonstrates a contrast regarding extraction from CP complements of *likely*/*clear* and *strange*/*dangerous*. With respect to TM adjectives, though, the facts are not quite clear. Extraction in the expletive construction is possible to some extent, the profile being reminiscent of weak islands (allowing extraction of arguments but not adjuncts); see footnote 22.

Pesetsky 1987: 128–129 documents reconstruction for anaphor binding with psychological predicates like *Pictures of himself$_i$ are difficult for John$_i$*. Landau 2010: 72–73, however, argues that such cases are logophoric given that binding is available even without c-command: *Each other$_i$'s remarks made [John and Mary]$_i$ angry*. See Pesetsky 1995 for an analysis where the reflexives are taken to be subject to the binding theory after all. I have tried to test reconstruction for variable binding with examples like *His$_i$/their$_i$ faults were well known to/difficult for every$_i$ professor* but have not been able to establish any clear contrasts; my consultants judge them all unacceptable. For arguments that variable-binding data do not provide solid evidence for reconstruction in null-operator and predication constructions, see Mulder & Den Dikken 1992: 308–310.

(25) a. *As __ is difficult (for me), John will not come to the wedding.
b. *As __ is annoying (to me), John will not complete his work on time.

The CPs in TM thus pattern with causers rather than subject-matter arguments: compare the following minimal pair (generously provided by one of the reviewers).

(26) a. As Mary is aware __, Nicole has won the prize.
b. *As Mary __ is happy, Nicole has won the prize.

Another diagnostic concerns Condition C. Longenbaugh 2016 argues that finite CP complements of TM adjectives must be structurally higher than the experiencer because, as (27a) illustrates, there are no Condition C effects, while regular complement clauses display a strong Condition C effect, as (27b) illustrates.

(27) a. It was hard on him$_i$ [that the government denied John$_i$ a visa].
b. *The letter convinced him$_i$ [that the government denied John$_i$ a visa].

As far as I can tell, other TM predicates, like *difficult for* and *important to*, pattern like *hard on* in (27a). Adjectives that pass the *as*-parenthetical test behave differently: as (28) illustrates, they do display Condition C effects.

(28) *It was clear/certain to him$_i$ [that the government would deny John$_i$ a visa].

Thus we appear to obtain the expected contrast.

When we apply other diagnostics to the German/Dutch translational equivalents of English TM adjectives, the result is quite clear: they behave like unergative predicates. Concretely, they are not compatible with embedded V2 and require an expletive subject under extraposition.[11]

[11] Cinque 1989: 86–90 provides the following contrasts.
In (i), we see the asymmetry with respect to embedded V2. (I have added the predicate *unmöglich* 'impossible'.)

(i) a. Es ist klar/bekannt/sicher, er wird kommen.
it is clear/known/certain he will come
'It is clear/known/certain that he will come.'
b. *Es ist angenehm/peinlich/gefährlich/wichtig/unmöglich, er wird kommen.
it is pleasant/embarrassing/dangerous/important/impossible he will come
Intended: 'It is pleasant/embarrassing/dangerous/important/impossible that he will come.'

Einfach and *leicht* 'easy' do not easily take a finite CP complement. With, for example, a complement like 'that I can't visit you', *schwer* and *schwierig* 'difficult' behave like unergative predicates.

The contrast in (ii) illustrates the asymmetry with respect to expletive subjects. (I have slightly modified Cinque's examples, converting them into subordinate clauses to make them more natural; I have also added the predicate *unmöglich* 'impossible'.)

(ii) a. weil (es) klar/bekannt/sicher ist, dass er kommt
because it clear/known/certain is that he comes
'because it is clear/known/certain that he will come'
b. weil *(es) angenehm/peinlich/gefährlich/unmöglich ist, dass er kommt
because it pleasant/embarrassing/dangerous/impossible is that he comes
'because it is pleasant/embarrassing/dangerous/impossible that he will come'

I thus conclude that projecting the clausal subject of English TM adjectives as an external argument is consistent with the diagnostics in the literature.

4.2 | Deriving the different surface orders

I will first discuss the TM construction before addressing the expletive version.

4.2.1 | The TM construction

The major advantage of the revised constituency is that the adjective (whether pied-piping the experiencer or not) can move to the exclusion of the CP without the CP having to undergo extraposition. This is schematically represented in (29) (the structure will be slightly revised below).[12]

(29) $[_{CP}\ [_{AP}$ How difficult (for George)$]_1$ is $[_{TP}$ Janice $[_{aP}\ [_{CP}$ to forget __] a $__{_1}]]]$?

Besides the revised constituency, the second crucial ingredient of this approach is the assumption, adopted from Bruening 2014, that extraposition of the null-operator CP is prohibited. This assumption fits nicely with the observation that the CP must be lower than adverbials like *yesterday* under AP extraction (Heycock 1994: 257):

(30) How difficult were the children (?*yesterday) to control (yesterday)?

Of course, this also holds for TM when there is no AP movement. Adverbs like *yesterday* can only occur to the left of the construction or at the extreme right (see also Heycock 1994: 258):

(31) (Yesterday,) the children were difficult (*yesterday) to control (yesterday).

The proposed extraposition restriction may at first sight seem ad hoc. Importantly, though, it covers more null-operator constructions than just TM. As discussed in Bruening 2014:

With, for example, a complement like 'that I can't visit you', *schwer* and *schwierig* 'difficult' behave like unergative predicates. For reasons unclear to me, *wichtig* 'important' does not require an expletive.

[12]In all cases of AP fronting, the PP can also be extraposed, arguably right adjoining to a vP-related position. Relevant examples are:

(i) a. How difficult was Janice to forget for George?
b. How difficult to forget was Janice for George?

Given that different adjectives select/prefer different prepositions (*on*, *to*, *for*), I assume that the PP has to be merged with the A rather than being introduced higher as in Keine & Poole 2017, where such dependencies would be more difficult to capture (recall also footnotes 5 and 7).

717, building on Doherty 2000: 59, it also holds for contact relatives and infinitival relatives:

(32) a. John gave a book (that) he wrote to Mary.
b. John gave a book $\_\__1$ to Mary [that he wrote]$_1$.
c. *John gave a book $\_\__1$ to Mary [he wrote]$_1$.

(33) a. The best person [to talk to] is Mathilda.
b. *The best person $\_\__1$ is Mathilda [to talk to]$_1$.

As noted in footnote 3 and as the contrast between (32b) and (32c) suggests, the precise restriction is on null-operator constructions with a silent C.

One may wonder about nominal TM (*a tough nut to crack*) and gapped degree constructions (*Kittens are too cute to resist*) in this context. Both are null-operator constructions without an overt C element, and at first sight, the null-operator clause seems to be nonadjacent to the element it combines with semantically: the adjective in nominal TM and the degree element *too* in gapped degree constructions. This seems to be in conflict with the extraposition restriction. However, upon closer inspection, these constructions do not involve extraposition of the null-operator clause.

To start with nominal TM, Flickinger & Nerbonne 1992: 291, fn. 16 and Dubinsky 1998: 113 show that the *Op* clause cannot in fact be extraposed (i.e., it cannot leave the noun phrase):

(34) a. Jacob gave [an easy knife to cut figurines with] to Michael.
b. *Jacob gave [an easy knife] $\_\__1$ to Michael [to cut figurines with]$_1$.

(35) a. An easy man to talk to arrived yesterday.
b. *An easy man $\_\__1$ arrived yesterday [to talk to]$_1$.

Dubinsky 1998: 110 proposes an alternative to account for the nonadjacency between adjective and *Op* clause involving movement of the adjective across the noun. Given this, nominal TM is not in conflict with the extraposition generalization.

As for gapped degree constructions, it is actually not clear whether the *Op* clause is nonadjacent to *too*. This would be the case under the analysis going back to Chomsky 1977, where the *Op* clause initially forms a constituent with *too* and is later moved to the right:

(36) Kittens are too $\_\__2$ cute [Op_1 to resist $\_\__1$]$_2$.

However, things are different under the analysis in Nissenbaum & Schwarz 2011: 17, which is what the intervention argument in Keine & Poole 2017 is based on. The operator actually moves across *too* to the specifier of the degree phrase:

(37) Berlin is [Op_1 too [for us to travel to $\_\__1$]] cold.

Given this constituency, extraposition of the *for* CP would not involve a null-operator CP and is therefore not expected to be restricted. An alternative to extraposition to account for the nonadjacency is to assume that it is the degree element that moves across the adjective; see Brillman 2015:

2. Indirect support for the nonextraposition account comes from the observation that the infinitival clause cannot be extraposed across adverbs. My consultants found a strong contrast in the following minimal pairs.

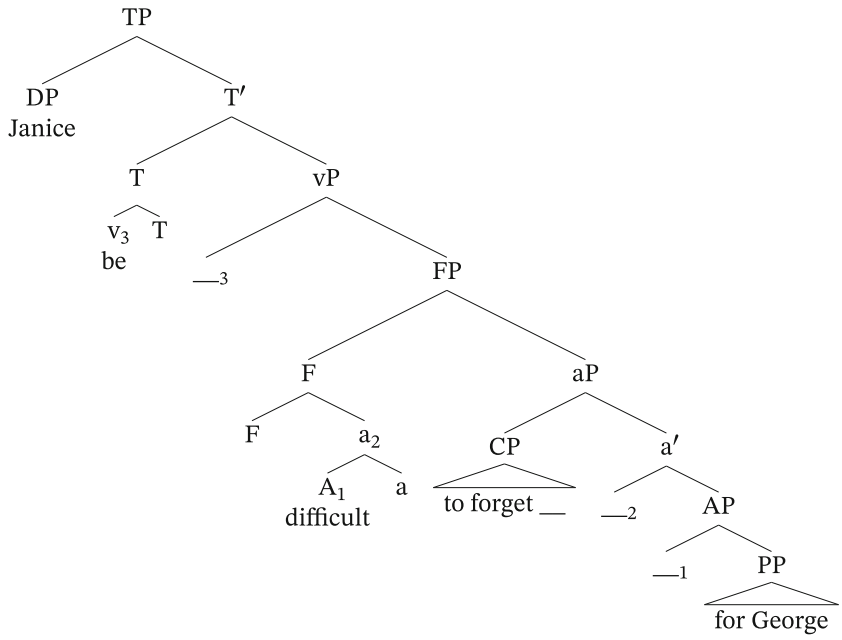
(38) a. Berlin is too cold to travel to in January.
b. *Berlin is too cold __$_1$ in January [to travel to __]$_1$.

(39) a. The exam was too difficult to pass this year.
b. *The exam was too difficult __$_1$ this year [to pass __]$_1$.

I thus conclude that neither nominal TM nor gapped degree constructions are in conflict with the restriction banning extraposition of null-operator constructions with silent Cs.[13]

The structure provided in (29) above needs to be slightly refined given the word order in TM without AP movement: the adjective precedes the CP. I propose that, as depicted in (40), A moves via a to a higher functional head that I will label F. The PP is stranded by head movement of A.

(40)



[13]One may wonder about the source of the extraposition restriction. Bruening 2014: 717 suggests two possibilities (without going into much detail): it could be due to a requirement that the null operator be adjacent to elements it is in a close syntactic/semantic relation with or a requirement for it to cliticize onto the TM predicate at PF to be licensed. The latter possibility is discussed at length with respect to contact relatives and complement clauses in Bošković & Lasnik 2003 and seems to provide the best empirical coverage at the moment, even though questions remain (e.g., with respect to control complements, which have to be analyzed as TPs). A third possibility is to relate the restriction to the reduced size of the *Op* clause, specifically, treating it as a TP rather than a CP. While such a claim has been made for contact relatives (see, e.g., Doherty 2000, Douglas 2016) and cannot a priori be ruled out for TM (given that left-peripheral adjuncts seem impossible within the *Op* clause), it is unlikely to be generally correct that TPs do not extrapose. Note, for instance, that extraposition of raising TPs is well established: see, for example, Bruening 2018: 394.

For the sake of concreteness, I assume that the copula is merged in v and moves from there to T. I also assume that the TM subject is base generated in the matrix clause. For my purposes, it does not matter whether it is base generated in spec,vP/FP and moved from there to spec,TP or is directly generated in the matrix subject position; for ease of representation, I have chosen the latter option in (40) and the following diagrams. This detail aside, my approach thus amounts to a version of the base-generation approach to TM found in, for example, Cinque 1990b, Rezac 2006, Keine & Poole 2017, and Salzmann 2017.[14]

Given this structure, the different placement options for experiencers are obtained as follows. The PP either occurs clause finally, as in (40) and (4b), or it can be topicalized or *wh* moved from this position, leading to (4a) and the example in footnote 7. Finally, in (7)—to the extent that it is grammatical—the PP undergoes some kind of short topicalization to vP. Crucially, the intervention configuration with the order A–PP–CP simply cannot be generated if CP cannot be extraposed (and the PP cannot undergo short movement to the left and adjoin to aP).

The adjunct-intervention data in (6b) can be accounted for given the structure in (40) as long as adverbials are adjoined to a verbal projection (which seems straightforward for temporal and locative adverbials). The adverb would thus either precede the adjective, if left adjoined to vP, or occur at the end of the sentence, if right adjoined. In addition, it could be topicalized. This generates the three grammatical options in (41). Crucially, there is no attachment site between the adjective and the CP, and consequently, the ungrammatical case from (6b) is successfully ruled out.[15]

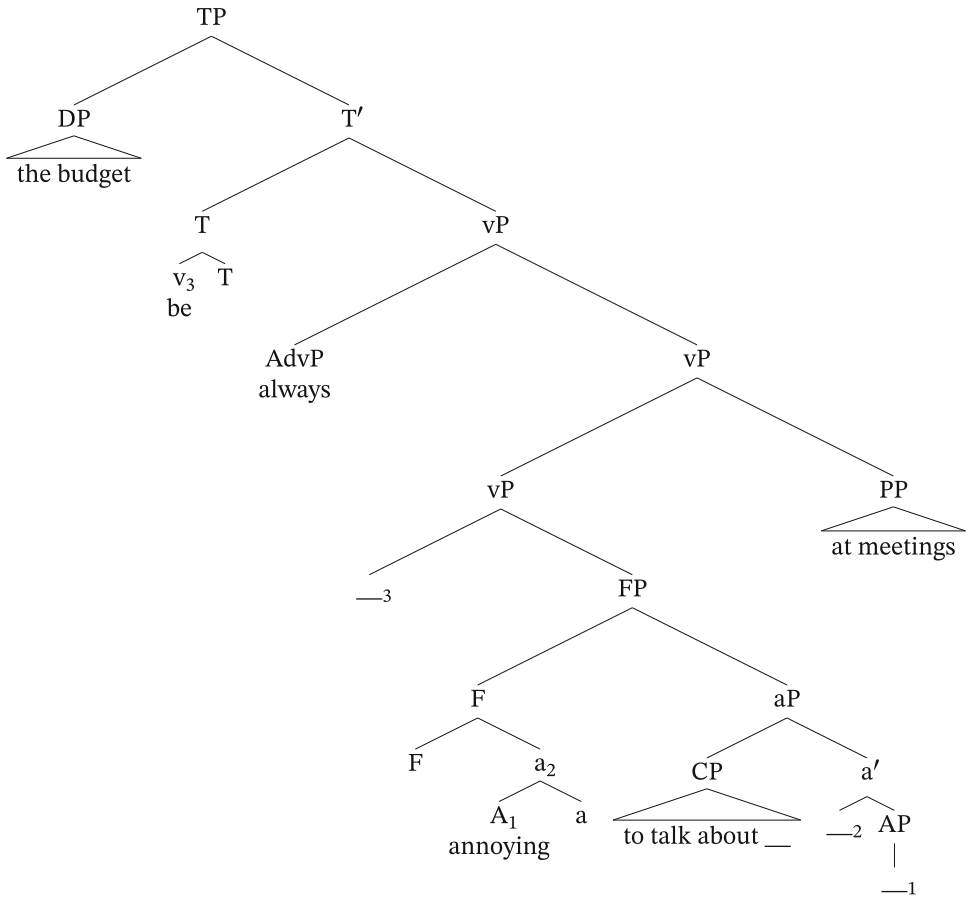
(41) (At meetings), the budget is (at meetings) annoying (*at meetings) to talk about (at meetings).

The following tree structure illustrates the version with the adverb in clause-final position.

[14]The major motivation for base generation comes from the fact that extraction from the nonfinite clause, given that it is projected as an external argument, would raise questions regarding the Condition on Extraction Domains. Note that the present approach differs from Longenbaugh 2016 in this respect: assuming base generation, nonfinite CPs projected as external arguments are, in principle, compatible with TM, while under Longenbaugh's approach, which involves long movement from the embedded clause, TM is blocked by the Condition on Extraction Domains. It is not clear to me how Longenbaugh can account for the fact that PP experiencers are possible in TM once they occur in different surface positions as in example (4)—this should not affect the projection of the CP as a specifier and thus should also lead to a violation of the Condition on Extraction Domains under his long-movement analysis. Another difference is that I always project the CP in the specifier, whether a PP is present or not. Longenbaugh, on the other hand, projects the CP as a complement in the absence of an experiencer. Since I am not aware of any evidence that adding an experiencer turns an unaccusative predicate into an unergative one, this strikes me as a problematic assumption. Note, finally, that Longenbaugh does not address AP movement; thus the prospects of his proposal with respect to the current debate cannot be evaluated.

[15]As for the grammaticality of adjuncts with English raising, as in (6c), what is different there is that there is a verbal projection between *seem* and the TP that the adjunct can attach to: assuming that *seem* moves to v, the adjunct can left adjoin to VP.

(42)



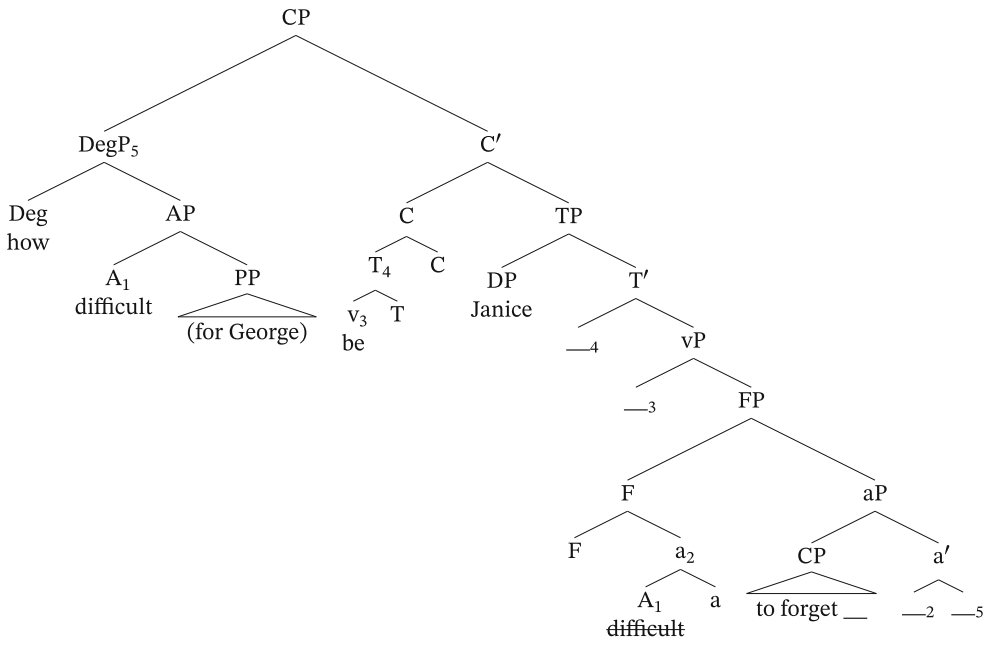
Given that the adjective moves via a to F, a little more needs to be said about the AP extraction in (14) and (15). One may wonder why the adjective is actually realized in the fronted AP and not in a position adjoined to F as in (40). Arguably it is not desirable to assume that movement to F only takes place in the absence of AP movement. I propose instead that A always moves to F (via a). However, when AP (more precisely, DegP) is extracted, the adjective is pronounced in its fronted position, as indicated in the following derivation. [16]

[16]A few remarks are in order about how pronunciation works here. Derivationally, there is a similarity to predicate clefting and predicate topicalization (see Hein 2017 for an overview). In these constructions, there is verb movement out of a VP to some functional head like T, followed by remnant-VP topicalization. In many languages, this leads to verb doubling/*do* support. The doubling is generally motivated by the fact that both positions are associated with a P requirement, that is, a requirement for the copy to be overtly realized. With respect to the fronted phrase, this has been related to (prosodic correlates of) whatever EPP feature attracts the phrase ([wh], [topic], [focus]); with respect to the lower copy, it often has to do with verbal morphology that needs support.

The pronunciation pattern in the case at hand is different in that only the higher instance of the adjective is realized. This pattern may at first seem unusual but can be motivated as follows. What is crucially different is that no overt morphology is inserted into a/F (there is thus no special P requirement). Consequently, there is no necessity for A to be spelled out in the lower position as well; economy will favor a structure where the adjective is realized only once. Note that in the absence of AP movement, the adjective is pronounced adjoined to F given that for reasons of recoverability at least one link of a chain must be realized, usually the higher one.

Remnant movement created by head movement can also lead to nondoubling patterns, as in the cases discussed in Müller 1998: 259–269: for example, in complex German prefields where a VP is fronted but its head has moved out of it

(43)



In the version where the PP is stranded (*How difficult was Janice to forget for George?*), it has undergone extraposition before (remnant-) AP movement, arguably attaching to a vP-related position, as in the next and final case.

The final word-order option that needs to be accounted for is where the infinitive is pied-piped by AP fronting (see also Higgins 1973: 77, Nanni 1980: 570, Levine & Hukari 2006: 360):[17]

(44) [How difficult to forget] was Janice (for George)?

Given the structure of aP/FP, I will assume that the movement-triggering *wh* element is merged above FP and drags the entire phrase along (given that FP is an extended projection of the adjective

prior to topicalization. In such constructions, the relevant element is only realized in its head-movement position (e.g., the finite verb in C, while there is no overt verb in the fronted VP). This pronunciation pattern can be motivated if only the position the verb moves to (e.g., C) has a P requirement. The fact that the verb is unrealized in the prefield could be related to the fact that in this construction it plays no information-structural role (what is contrasted are the nonverbal parts of the VP). The case discussed in this remark would constitute the third realization option in such a derivational scenario (namely, a remnant created by head movement). It differs from the cases discussed in Müller 1998: 259–269 in that the material in the prefield plays a clear semantic/information-structural role; consequently, the copy of the adjective in the fronted phrase is realized rather than the one adjoined to F.

Note that the P requirement with respect to the DegP in its landing site does not imply that all its constituents necessarily have to be realized within the top copy. While the experiencer remains within DegP in (43), it undergoes extraposition in (45) below and is realized in its landing site. Here, remnant movement leads to a different pronunciation pattern than for the adjective. This can be related to the fact that extraposition comes with its own P requirement such that it is the copy in the extraposed position that is realized; note that the PP plays no information-structural role within the *wh* phrase in (43) and (45) while the adjective clearly does.

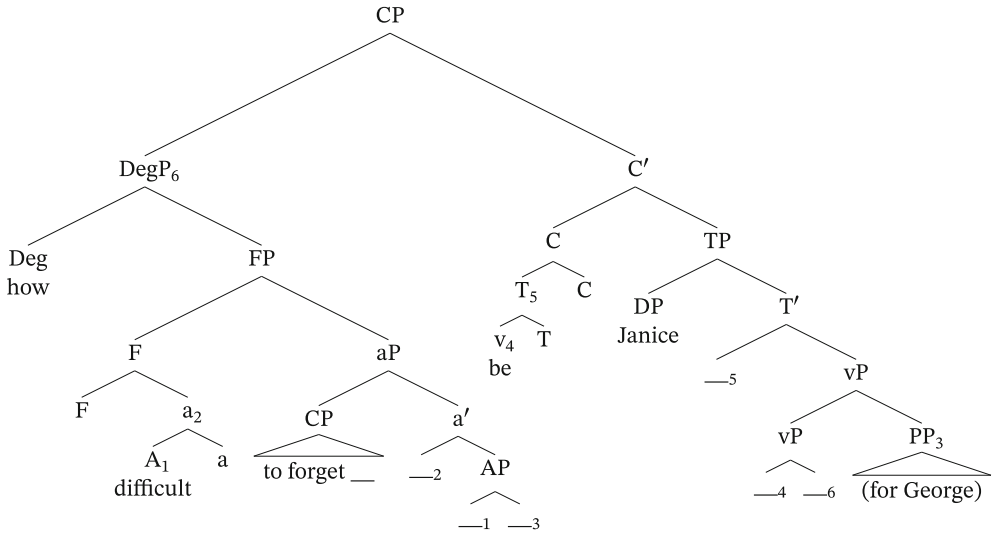
[17] A variant of (44) would be (i), where the PP is not stranded/extraposed.

(i) How difficult to forget for George was Janice?

The current system predicts this option to be available; my consultants found examples of this type somewhat cumbersome, though.

and the adjective is adjoined to F, this should be unproblematic):[18]

(45)



4.2.2 | The expletive construction

I will assume that the expletive construction is based on the same unergative structure as TM with A undergoing movement to F via a. The clausal subject can move to spec,TP or undergo extraposition. This leads to the following two basic options.

[18]One may wonder about the two possible attachment sites of degree modifiers, AP and FP. One of the reviewers voiced concern that this optionality may predict unattested word orders. For instance, in a sentence like (ia), movement of A to F could strand a degree expression attached to AP. Conversely, AP movement could strand a degree expression attached to FP, as in (ib).

(i) a. *Janice is difficult to forget very/extremely ~~difficult~~.
b. *Difficult though Janice is very/extremely ~~difficult~~ to forget ~~difficult~~.

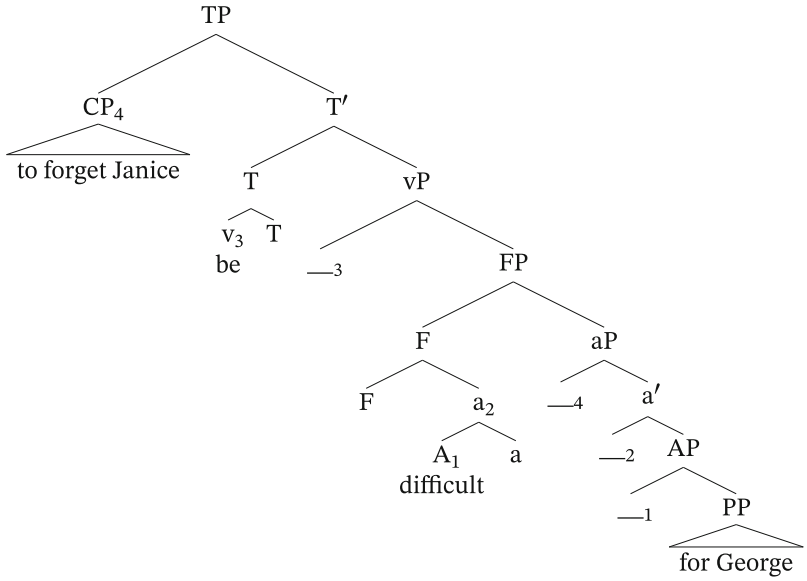
While the syntax of degree expressions is too complicated to do full justice to here, a few things can be said about the examples in (i). First, (ia) can be independently ruled out given that degree elements of this type cannot be stranded by movement (see Neeleman et al. 2004: 21); in the case at hand, moving the adjective over the Deg element would arguably involve a violation of the head-movement constraint. As for (ib), it can be ruled out if the ban on stranding generally requires degree elements of this type to have an overt complement.

A uniform attachment site under present assumptions is confronted with difficulties. If Deg were always introduced right above AP, thus limiting fronting to AP movement, it would be unclear how examples like (44) could be derived, where the CP is fronted together with the TM adjective. Conversely, if Deg were invariably introduced above FP, thus limiting fronting to FP movement, the A+PP-fronting cases like (15) could no longer be derived. While this may initially seem attractive, to cover those speakers who find such cases strongly degraded, one would still have to account for the cases like (14), where only the AP is fronted. With a uniform attachment site for Deg above FP, this would require aP extraposition and remnant-FP movement. Note that since aP contains InfP+PP, this would not by itself generate the illicit A–PP–InfP word order. But if the experiencer underwent extraposition (the fact that it can be stranded by A+CP fronting, as in (44), shows that this must independently be possible), subsequent aP extraposition could derive the illicit A–PP–InfP word order after all. Finally, aP extraposition is obviously in conflict with the observation that there is no CP extraposition in TM (recall the data in (30) and (31)). I thus conclude that a uniform attachment site for degree elements is not obviously compatible with the assumptions needed to account for other aspects of the construction.

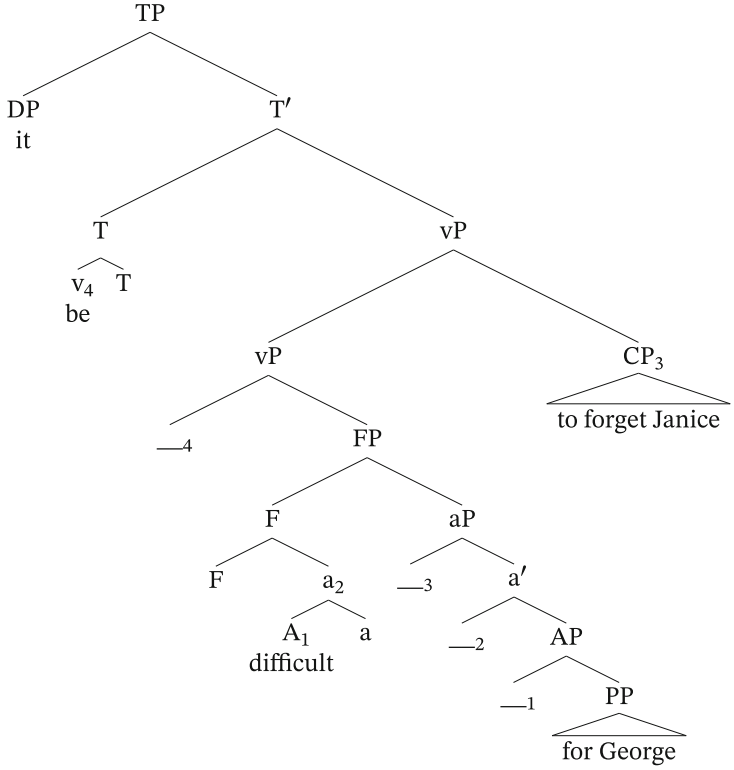
(46) a. [To forget Janice] is difficult for George.
b. It is difficult for George [to forget Janice].

The structure of (46a) is illustrated in (47); the structure of (46b) is illustrated in (48). I am assuming that extraposition targets (at least) vP.

(47)



(48)



The structure in (48) makes a number of correct predictions. First, AP can move by itself, without the CP (see, e.g., Higgins 1973: 73, Nanni 1980: 578):

(49) [How easy] is it to please John?

In this case Deg attaches to AP, as in (43) (see discussion in footnote 18).

Second, the adjective can pied-pipe the PP:[19,20]

(50) [How important to you] is it to have a good boss?

Furthermore, it also seems to be possible to pied-pipe the CP, despite claims to the contrary in Higgins 1973: 73 and Nanni 1980: 578; at least, my consultants accepted examples of the following type (what improves these examples is material after the expletive).

(51) [How easy to sleep] is it on such a terrible day?

This will require a derivation like the one for CP pied-piping under TM, with *how* attaching to FP, as in (45).

Finally, since the CP is extraposed, we correctly predict that it can follow adverbs (whether an experiencer is present or not):[21]

(52) a. Why is it important [to you] now [to make a change to your crazy busy life]?
b. It was tough yesterday [to bury my grandma].

This is in fact responsible for the lack of adjunct-"intervention" effects in examples like (53), repeated from (6a), which receive the structure in (54) (assuming that both the adjunct and the CP are adjoined to vP).

(53) It is always annoying (at meetings) to talk about the budget.

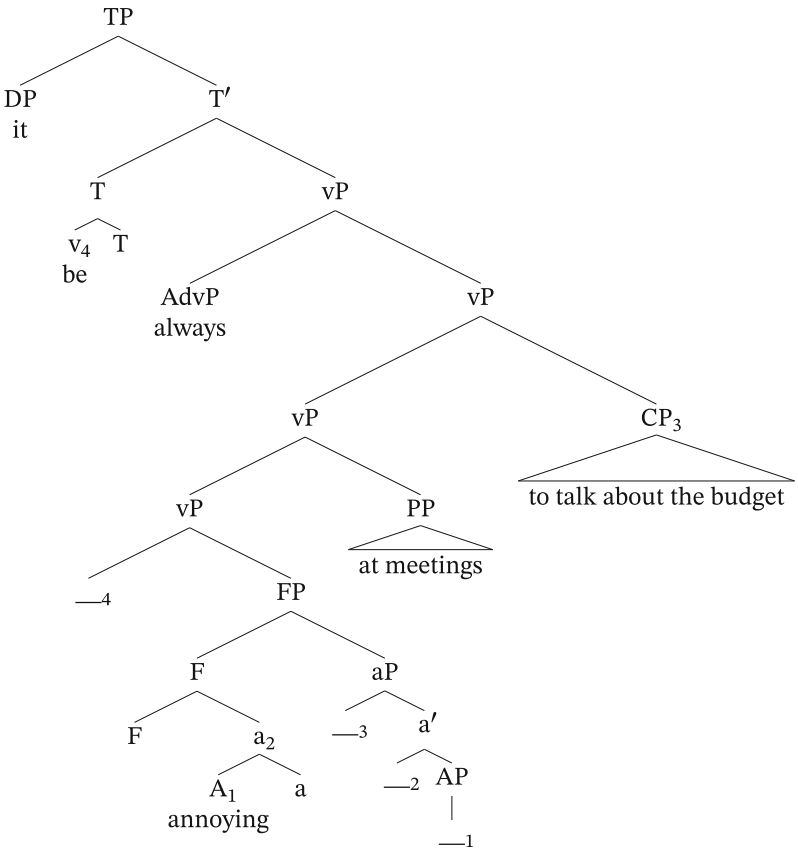
[19] Example from http://www.reddit.com/r/careerguidance/comments/faum4b/how_important_to_you_is_it_to_have_a_good_boss/, accessed October 27, 2020.

[20] Alternatively, the PP can undergo extraposition, leading to orders like in (i) (that *for* can introduce an experiencer here is shown by the fact that it could be separated from the nonfinite clause by an adverb).

(i) [How easy] is it for you to please John?

[21] Examples from https://ulrikasullivan.com/change-your-crazy-busy-life/, accessed October 27, 2021, and https://denver.cbslocal.com/2014/07/28/demaryius-thomas-back-at-broncos-camp/, accessed October 27, 2020.

(54)



This concludes my discussion of the various orders that obtain in both TM and the expletive variant.[22]

[22]Given that the CP is an external argument under my analysis, questions arise with respect to locality. It is generally assumed that the nonfinite CP is more permeable in the expletive version than in TM. This is likely due to the fact that TM additionally involves operator movement. However, the relevant question here is whether the present approach actually predicts the CP to be less transparent than it actually is (specifically, whether it predicts extraction to be blocked by the Condition on Extraction Domains). The literature on this is, as far as I can tell, not fully clear. Most claims are about the contrast between the two versions, but it remains somewhat open how the expletive construction compares to other islands. In Chomsky 1981: 311, an example like *How intelligent is it easy to regard John as __?* is classified as "hardly elegant." As far as I can tell, the expletive construction tends to have a weak-island profile, permitting extraction of (D-linked) arguments but barring extraction of adjuncts (compare ?*Which problem is it easy to solve __?* and ??/**How is it easy to solve this problem __?*).

One of the reviewers argues that the extraposition analysis incorrectly predicts freezing effects in the expletive construction. Extraction from the CP should therefore be more degraded than what is observed here, given that argument extraction from extraposed NPs, PPs, and noun-complement clauses is ungrammatical (cf., e.g., **What*$_2$ *did you give* —$_1$ *to John [a book about* —$_2$*]*$_1$*?*). However, as shown in Drummond 2009: (17) and Bruening 2018: 393–394, extraposed argument CPs differ from other categories in that they do not seem to block (argument) extraction from them (e.g., *Who did you suggest yesterday that Bill should marry __?*). Thus, a certain degree of transparency of the CP in the expletive construction, whatever its cause may be, does not argue against the extraposition analysis proposed here. In fact, the observed weak-island profile fits rather well with the traditional classification of extraposition islands as weak islands: see Cinque 1990b. The fact that the weak-island profile obtains both with and without experiencers may suggest that the CP is always extraposed when occurring in postadjectival position even if this is not visible on the surface (note that without an experiencer, the correct surface order would also obtain if the CP remained in spec,aP).

5 | DISCUSSION AND CONCLUSION

In this remark, I have shown that the degradedness that obtains when experiencers are present in TM is unrelated to syntactic or semantic intervention. The crucial evidence comes from the possibility of fronting the AP to the exclusion of the nonfinite CP. Under the assumption that the CP is a complement of the TM adjective, this would require extraposition. However, once CP extraposition is possible, the intervention configuration can no longer be ruled out since it should always be possible to shift the CP across the experiencer (starting from an A–CP–PP order).

I have therefore argued in favor of a different approach where the restriction has nothing to do with either syntactic or semantic intervention but is related to basic word-order properties of the language. This approach combines insights from Longenbaugh 2016, in projecting the nonfinite CP as an external argument, and from Bruening 2014, in barring extraposition of this type of null-operator CP. The revised constituency makes it possible for the AP to move without the CP having to undergo extraposition. As I have shown, given certain assumptions about movement of the adjective, all relevant word-order options for the construction (including the expletive version) can be captured.

The only obvious alternative to capture the word-order facts in TM is to treat the infinitival CP as an adjunct, for example, to AP. If AP is moved, it could either strand the CP or pied-pipe it (e.g., as in VP topicalization). The CP would crucially not have to undergo extraposition. But on such an approach, it is unclear how the experiencer PP could be introduced. Given that it is an argument (recall that different adjectives require different prepositions, suggesting a selectional relationship), it would have to be introduced before the CP adjunct, but then it is unclear again how to prevent the intervention configuration. Arguments against adjunct status for the CP can also be found in Rezac 2006: 291, which points out that one fails to find the entailments one would expect (e.g., *The stone is easy to lift* $\not\succ$ *The stone is easy*). Furthermore, if the CP is treated as an adjunct, it is no longer clear how one can ensure that the right predicates occur with the right type of CP complement (predicative versus nonpredicative). Given that some predicates allow only the expletive version of the construction, some allow only the TM version, and some allow both, selection seems to be involved. But that requires the CP to be treated as an argument of the adjective. I thus conclude that analyzing the CP as an adjunct is not a viable alternative.

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As a final point, note that Landau 2001: 127–130 argues that extraction from obligatory-control infinitives that originate as external arguments in spec,vP is possible:

(i) [To whom]$_1$ would it help Bill$_i$ [PRO$_i$ to introduce himself$_i$ __$_1$]?

Landau argues that extraction can take place from the base position in spec,vP, with extraposition of the CP being purely phonological. Against this background, the (relatively high degree of) transparency of the CP in the expletive construction, which likewise is an external argument, seems unsurprising. I leave it to future work to clarify whether there is a difference in transparency between different types of extraposed subject clauses, particularly those originating as complements and those originating as external arguments (of adjectives).

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DATA-AVAILABILITY STATEMENT

The original data generated by this study are given explicitly in the text.

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