### On Object Extraposition in Icelandic: A Reply to Drummond and Hornstein

**Abstract:** Wood (2012) argued that object extraposition of infinitive clauses in Icelandic reveal a problem for the Movement Theory of Control (MTC). Object extraposition involves a pronoun which, when present, prevents any movement out of the extraposed clause, but allows the control dependency. Drummond and Hornstein (2014) claim that the facts discussed in Wood (2012) are compatible with the MTC. In this reply, I show that their response is based on a misunderstanding of how Icelandic object extraposition works, and that the problem observed in Wood (2012) remains.

### 1 Object Extraposition and the Movement Theory of Control

Thráinsson (1979) contained a detailed study of Icelandic clausal extraposition from the subject and object positions. In the course of this study, Thráinsson (1979) points out that control infinitives can extrapose from subject and object positions as well. In sentences like (1), an optional (case-marked) pronoun  $ba\delta$  'it' may appear; the presence of the pronoun generally—but not always, as we will see further below—indicates that extraposition has taken place.<sup>2</sup>

- (1) a.  $Peir_i$  ákváðu (það) að  $PRO_i$  heimsækja Ólaf. they.NOM decided (it.ACC) to visit Olaf.ACC 'They decided to visit Olaf.' (Thráinsson 1979:110–111)
  - b.  $Peir_i$  frestuðu (því) að  $PRO_i$  hálshöggva fangana. they.NOM postponed (it.DAT) to execute the.prisoners.ACC

'They postponed executing the prisoners.' (Thráinsson 1979:228–229)

Wood (2012) argues that the availability of this pronoun in Obligatory Control (OC) structures is problematic for the Movement Theory of Control (MTC) (Hornstein 1999; Boeckx and Hornstein 2006; Boeckx et al. 2010a,b). According to the MTC, the surface subject in (1), *peir* 'they', moves from the embedded subject position into the matrix clause by A-movement. The landing site of the movement is the external argument position of the matrix clause, SpecvP. The control reading is derived because the A-chain contains one DP in two theta-positions: in this case, the embedded external

argument position and the matrix external argument position.

However, Thráinsson (1979) showed that A'-extraction can occur out of a control clause only when that pronoun is not present, as illustrated for topicalization in (2a).

- (2) a. Ólaf<sub>i</sub> ákváðu þeir (\*það) að PRO heimsækja  $t_i$ . Olaf.ACC<sub>i</sub> decided they.NOM (\*it.ACC) to visit  $t_i$  'Olaf, the decided to visit.'
  - b. Fangana<sub>i</sub> frestuðu þeir (\*því) að PRO hálshöggva  $t_i$ . the prisoners ACC<sub>i</sub> postponed they NOM (\*it.DAT) to execute  $t_i$  'The prisoners, they decided to postpone executing.'

Moreover, there are no known cases of A-movement past such pronouns. For example, (3b) shows that aspectual verbs can have raising verb syntax, since they preserve the dative case assigned by the embedded verb *leiðast* 'feel bored'. (4) shows that the extra pronoun is not possible with these verbs.

- (3) a. Mér leiddist. me.DAT bored 'I felt bored.'
  - b. Mér { byrjaði / hætti } að leiðast.
    me.DAT { began / stopped } to bore
    'I began/stopped feeling bored.' (Sigurðsson 1989:70)
- (4) a. Haraldur byrjaði (\*það) að senda henni bréf. Harold.NOM began (\*it.ACC) to send her letters 'Harold began to send her letters.'
  - b. Haraldur hætti (\*því) að senda henni bréf.
     Harold.NOM stopped (\*it.DAT) to send her letters
     'Harold stopped sending her letters.'
- (5) shows that these verbs are capable of assigning case to DP objects; *byrja* 'begin' assigns accusative and *hætta* 'stop' assigns dative. Thus, the problem with the extra pronoun in (4) cannot be that the matrix verb has no way to assign case to it.<sup>3</sup>

- (5) a. Þjálfarinn byrjaði leikinn.

  coach.the.NOM began game.the.ACC

  'The coach began the game.'
  - b. Þjálfarinn hætti leiknum.coach.the.NOM stopped game.the.DAT'The coach stopped the game.'

The claim in Wood (2012) is that since a control dependency is possible past this pronoun, but no movement dependencies are possible past it, the control dependency should not be modeled as movement as it is currently understood. Of course, the MTC position has repeatedly emphasized that differences between raising constructions and control constructions are not automatically problems for the MTC, since "raising A-movement" and "control A-movement" involve different landing sites; therefore, differences between control and raising constructions could stem from these differences in the landing sites. Wood (2012) considered and dismissed two possible analytical avenues for the MTC, one treating these constructions as non-obligatory control (NOC) and the other claiming that the pronoun was not in a  $\theta$ -position, and therefore not an intervener for the movement. Since these points have been left intact by Drummond and Hornstein (2014) (henceforth D&H), I will not discuss them further here.

D&H claim that the facts in Wood (2012) can be handled by the MTC under the assumption that extraposition involves right adjunction to vP. The idea is this. The problem with (4) is that the DP moves to SpecTP, but the extraposed infinitive is adjoined to vP. There are two ways of accomplishing this, and both lead to problems. First, one might first adjoin the infinitive to vP, and from there, raise the subject out of the infinitive into the matrix subject position. But this is impossible because an extraposed infinitive is an island for extraction. Second, one might first raise the subject out of the infinitive into the matrix subject position (SpecTP), and then adjoin the infinitive to vP. This, however, violates the Extension Condition, which requires that Merge applies to the root of the tree (Chomsky 1995). Since vP is dominated by TP,

the clause cannot adjoin to vP after TP has been built. Control clauses, however, are different in that the DP in the infinitive is moving to SpecvP, not SpecTP. So a subject can move to SpecvP, and the clause can adjoin to vP, and the problems associated with raising clauses vanish: movement occurs before the clause becomes an island, and adjunction respects the Extension Condition.

The consequences of their reasoning are a bit more serious than they indicate. I will postpone some of them until section 5, because while they are worth discussion, they do not make up the primary thrust of the present reply. First, I will claim that D&H's reply is misguided in its attempt to account for control past the pronoun in terms of the landing site of object extraposition. The presence of the pronoun does not force extraposition, and clauses occurring with the pronoun are islands for extraction whether extraposition takes place or not. Therefore, movement is impossible even before extraposition takes place, so the question of invoking the landing site is moot. Moreover, extraposition does not always force the presence of the pronoun, and when the pronoun is not present, extraposed clauses are not necessarily islands for extraction. Thráinsson (1979) argued in detail that the pronoun underlyingly forms a constituent with the clause, and that this constituent is an island. I will show that facts motivating Thráinsson's analysis carry the same force today that they did in the theory of that time.

# 2 Constituency

While Drummond and Hornstein (2014) note that Thráinsson (1979) analyzes sentences such as (1), when the pronoun is present, as involving object extraposition, they do not discuss what Thráinsson's analysis of object extraposition was. In fact, Thráinsson (1979) argues at length that the pronoun and the following clause form a constituent, and that when object extraposition takes place, the clause is extraposed out of this complex NP.<sup>4</sup> Thráinsson (1979:219–220) cites numerous constituency tests in favor of this conclusion. They include topicalization (6a), left dislocation (6b), it-clefting (6c), passivization (6d), and right-node raising (6e).

- (6) a. [Það að María skuli hafa farið] harma ég ákaflega. [it that Mary should have gone] regret I deeply 'That Mary went, I deeply regret.'
  - b. [ Það að María skuli hafa farið ], það er hörmulegt.[ it that Mary should have gone ], that is deplorable'That Mary went, that is deplorable.'
  - c. Það er [ það að María skuli hafa farið ] sem Jón harmar ákaflega.it is [ it that Mary should have gone ] that John regrets deeply'It is that Mary went that John deeply regrets.'
  - d. [ Það að María skuli hafa farið ] er almennt harmað.[ it that Mary should have gone ] is generally regretted'That Mary went is generally regretted.'
  - e. Jón harmar en Haraldur elskar [það að María skuli hafa farið].

    John regrets but Harold loves [it that Mary should have gone]

    'John regrets but Harold loves that Mary went.'

I will refer to clauses headed by this pronoun as pronoun-headed clauses (PHCs). Control PHCs also pass constituency tests:<sup>5</sup> they may be topicalized (7), or undergo contrastive dislocation (8) (Thráinsson 1979, 2007; Zaenen 1980, 1997; Ott 2014).

- (7) a. [ Það að PRO $_i$  heimsækja Ólaf ] ákváðu þeir $_i$ , en... [ it.ACC to visit Olaf ] decided they, but... 'They decided to visit Olaf, but...'
  - b. [ Pvi að  $PRO_i$  hitta Mariu ]  $gleymdi ég_i...$  [ it.DAT to meet Mary ] forgot I... 'I forgot to meet Mary...'
  - c. [Pví að PRO $_i$  gefa Helgu þennan hring ]

    [it.DAT to give Helga.DAT this ring.ACC]

    lofaði Ólafur $_i$  Maríu.

    promised Olaf.NOM Mary.DAT

    'Olaf promised Mary to give Hega this ring.'

- (8) a. [ Það að PRO $_i$  heimsækja Ólaf ], (einmitt) það ákváðu þeir $_i$ . [ it.ACC to visit Olaf ] (exactly) it.ACC decided they 'To visit Olaf, they decided to do just that.'
  - b. [ Pvi að  $PRO_i$  heimsækja  $PRO_i$  heimsæk
  - c. [ Því að PRO<sub>i</sub> gefa Helgu þennan hring ],
    [ it.DAT to give Helga.DAT this ring.ACC ]
    (einmitt) því lofaði Ólafur<sub>i</sub> Maríu.
    (exactly) it.DAT promised Olaf.NOM Mary.DAT
    'To give Helga this ring, Olaf promised Mary to do just that.'

Some constituency tests do not apply well to control PHCs due to the anaphoric nature of PRO. Thráinsson (1979:117–118) shows that Icelandic constrains backward anaphoric relations in certain constructions. Thus, even if a finite complement clause is passivized, the result is only fully acceptable if the clause is extraposed, as shown by the contrast in (9b–c).

- (9) a. Stjórnin $_i$  áleit [ að kjósendur myndu styðja hana $_i$  ]. the government. F thought [ that voters would support it. F ] 'The government thought that voters would support it.'
  - b. ?? [ Að kjósendur myndu styðja hana<sub>i</sub> ]
    [ that voters would support it.F ]
    var álitið af stjórninni<sub>i</sub>.
    was thought by the government.F
  - c. Það var álitið af stjórninni<sub>i</sub>it was thought by the government

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[ að kjósendur myndu styðja hana<sub>i</sub> ]
[ that voters would support it.F ]
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'It was thought by the government that voters would support it.'

Similarly, if a control clause is passivized, the presence of the null pronoun (PRO) means that the result will only be fully acceptable if the clause is extraposed, as shown by the contrast between (10b), on the one hand, and (10c–d), on the other.

- (10) a. Stjórnin $_i$  ákvað [ að PRO $_i$  fella gengið ]. the government decided [ to devaluate the currency ] 'The government decided to devaluate the currency.'
  - b.  $?*[að PRO_i fella gengið] var ákveðið af stjórninni_i$  [to devaluate the.currency] was decided by the.government
  - c. Það var ákveðið af stjórninni, [að PRO, fella gengið].
    it was decided by the government [to devalue the currency
    'It was decided by the government to devalue the currency.'

I will take it that the examples in (7) and (8) are enough to show that control clauses headed by a pronoun do form a constituent with that pronoun, just like the finite clauses do, and that extraposition is movement of the CP out of that constituent.

There is even further reason to believe that the presence of the pronoun does not necessarily indicate that extraposition has applied. According to Thráinsson (1979:221), the sentence in (11b) involves extraposition, while the sentence in (11a) does not. The sentences in (12), then, show that the pronoun itself can only be topicalized when the clause has extraposed: (12a), in which the pronoun is topicalized from the non-extraposed order of (11a), is ungrammatical, while (12b), in which the pronoun is topicalized from the extraposed order of (11b), is grammatical.

- (11) a. Ég veit [ það að María er farin ] alveg fyrir víst.

  I know [ it that Mary is gone ] quite for sure
  - b. Ég veit það alveg fyrir víst [ að María er farin ].I know it quite for sure [ that Mary is gone ]

- (12) a. ?\* Það veit ég [ að María er farin ] alveg fyrir víst. it know I [ that Mary is gone ] quite for sure
  - b. Það veit ég alveg fyrir víst [ að María er farin ].it know I quite for sure [ that Mary is gone ]

These facts receive a straightforward explanation: if extraposition does not apply, topicalization moves the entire PHC, yielding sentences like (6a)/(7). If extraposition moves the CP out of the PHC, then topicalization of the DP remnant yields (12b).

Assuming this much, it is straightforward to test whether PHCs are islands when extraposition does not take place; sentences (13b–c) verify that they are.

- (13) a. Ég veit [ það að Jón elskar Maríu ] alveg fyrir víst.

  I.NOM know [ it that John.NOM loves Mary.ACC ] quite for sure

  'I know that John loves Mary for sure.'
  - b. \* Maríu $_i$  veit ég [ það að Jón elskar  $t_i$  ] alveg fyrir víst.

    Mary.ACC $_i$  know I.NOM [ it that John.NOM loves  $t_i$  ] quite for sure INTENDED: 'Mary I know that John loves for sure.'
  - c. \* Hverja<sub>i</sub> veist þú [ það að Jón elskar t<sub>i</sub> ] alveg fyrir víst? who.ACC<sub>i</sub> know you.NOM [ it that John.NOM loves t<sub>i</sub> ] quite for sure INTENDED: 'Who do you know that John loves for sure?'

Now, one could try to claim that in (13a), the clause in fact has undergone extraposition, and that the adverbial *alveg fyrir víst* 'for sure' is simply right adjoined to vP after the clause has adjoined there. This, however, requires a new explanation for (12b), which follows straightforwardly from the assumption that extraposition has not taken place.

To take another example, it has been noted that extraction is possible out of clauses which have undergone right-node raising (RNR).

[Which official] $_i$  did they say that Bob suspected and Frank proved [that Sally bribed  $t_i$ ]? (Postal 1998:146)

In Icelandic, too, it is possible to extract out of a RNR clause—as long as the clause is not a PHC (see 6e), as illustrated in (15) (examples due to E.F. Sigurðsson (p.c.)).

(15) a. Hvern $_i$  elskar Jón en aðrir hata who.ACC loves John but others hate

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[ (*það) að deildin vill ráða t_i ]?
[ (*it.ACC) that the department wants hire ]
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'Who does John love but others hate that the department wants to hire?'

b. Hvern $_i$  er Jón ánægður með en aðrir eru ósáttir við who.ACC is John happy with but others are unhappy with

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[ (*það) að deildin vill ráða t_i ]?
[ (*it.ACC) that the department wants hire ]
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'Who is John happy with but others unhappy with the department wanting to hire?'

The strength of this argument depends on whether extraposition has taken place in examples like (6e). If we assume that the only parse of (6e) is one in which extraposition has taken place, then (15) does not say anything beyond the general fact that extraction is impossible out of object extraposed clauses. I know of no good reason to suppose that extraposition has taken place in (6e); (6e) simply fits in with all the other constituency tests showing that the pronoun and the CP form a constituent. Why should it not be possible to RNR such a constituent? Moreover, it is important to realize that even if extraposition is one possible parse of (6e), the argument goes through so long as it is not the only parse. Suppose there is one parse of (6e) where the pronoun and the CP form a surface constituent, and another where the CP has extraposed out of that constituent. If the islandhood of PHCs derives from the extraposition operation, then extraction should be possible under the parse where extraposition has not taken place. But this is not so: extraction is not possible at all, which follows from the claim that PHCs are islands whether extraposition takes place or not.<sup>6</sup>

So far, then, we have good reason to believe that for PHCs, the pronoun and the clause form a constituent, and that extraction out of the CP contained in this constituent is not possible, regardless of whether extraposition has taken place. In the next section,

this point will be strengthened by an examination of subject extraposition.

## 3 Subject Extraposition

To appreciate the point about constituency discussed in the previous section, it is important to turn to subject extraposition. In short, subject extraposition shows that it is not extraposition that creates an extraction island *per se*, it is the PHC that is an island for extraction. That is, subject extraposition is sometimes movement of a CP out of a PHC, but sometimes it is just movement of a CP. Only in the former case is the extraposed clause an island for extraction. Importantly, Thráinsson (1979) argued that unlike subject extraposition, object extraposition is *always* movement out of a PHC. Thus, object extraposition is an extraction island not because of landing site of extraposition—not even because of extraposition at all—but because object extraposition involves a PHC, which is always an extraction island.

Thráinsson (1979) was investigating a well-known proposal by Rosenbaum (1967), according to which sentential complements were NPs headed by a sometimes silent pronoun 'it'. According to this view, extraposition involved movement of the CP (to update the terminology) out of this NP constituent. Thráinsson's conclusion was that the Rosenbaum structures do exist—but that another option also exists, namely extraposition of the CP leaving behind a dummy pronoun. That is, it cannot be maintained that all CP extraposition involves movement out of an NP.

Consider first the sentence in (16).

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(16) Það er merkilegt [ að jörðin skuli vera hnöttótt ].it is interesting [ that the earth should be round ]'It is interesting that the earth is round.' (Thráinsson 1979:191)
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This sentence is ambiguous; it can be derived by extraposing the CP out of the PHC in (17a), or by extraposing the clause in (17b) and inserting a dummy expletive.

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(17) a. [Það að jörðin skuli vera hnöttótt] er merkilegt.

[ it that the earth should be round] is interesting

'That the earth is round is interesting.' (Thráinsson 1979:190)
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b. [Að jörðin skuli vera hnöttótt] er merkilegt.[that the earth should be round] is interesting'That the earth is round is interesting.' (Thráinsson 1979:190)

The difference between the two derivations can be seen by forming a yes-no question from the sentence in (16). The dummy pronoun is not retained in such contexts. Thus, the extraposed sentence in (18a) is unambiguously derived from a structure such as (17a), while the extraposed sentence in (18b) is unambiguously derived from a structure such as (17b).

- (18) a. Er það (ekki) merkilegt [ að jörðin skuli vera hnöttótt ]?

  is it (not) interesting [ that the earth should be round ]

  'Is(n't) it interesting that the earth is round?' (Thráinsson 1979:192)
  - b. Er (ekki) merkilegt [ að jörðin skuli vera hnöttótt ]?is (not) interesting [ that the earth should be round ]'Is(n't) it interesting that the earth is round?' (Thráinsson 1979:192)

Three further pieces of evidence corroborate this view. First, for many predicates, PHCs require a special discourse context. This discourse context is also required when the pronoun is retained under subject-verb inversion, supporting the view that retention of the pronoun indicates extraposition out of the PHC. Second, for verbs that assign dative or genitive case to the pronoun, only the non-dummy pronoun may retain this case. The nominative/accusative  $pa\delta$  is still possible, but only in the first position; in non-initial contexts,  $pa\delta$  is impossible. Third, some verbs not only assign dative or genitive case to the pronoun when it is there, but they also require its presence. For such verbs,  $pa\delta$  is impossible in general.

Illustrating the first point, Thráinsson (1979) notes that with non-factive and semi-factive predicates such as *satt* 'true', *líklegt* 'likely' and *augljóst* 'obvious', the pronoun is often unacceptable without a special discourse context.

(19) #[Það að Jón hefur étið hákarlinn] er augljóst.[it that John has eaten the.shark] is obvious (Thráinsson 1979:181)

If the proposition is mentioned in the discourse first (providing an antecedent for the pronoun), then such sentences are possible, as illustrated with the dialogue in (20).

- (20) A: Það er augljóst að María heldur við Harald og elskar Jón ekki neitt. it is obvious that Mary holds with Harold and loves John not at.all 'It's obvious that Mary's having an affair with Harold and doesn't love John at all.'
  - B: [Það að María heldur við Harald] er augljóst,
    [it that Mary holds with Harold] is obvious
    (en ég gæti nú samt trúað að hún elskaði Jón).
    but I could now still believe that she loved John
    'That Mary's having an affair with Harold is obvious
    but I could still believe that she loves John.' (Thráinsson 1979:202)

When the pronoun is retained in non-initial contexts, and the CP extraposes, the same requirement for a special discourse context shows up.

(21) # Nú er það augljóst að María heldur við Harald. now is it obvious that Mary holds with Harold 'Now it's obvious that Mary's having an affair with Harold.'

Thus, the same kind of discourse context is required for (a) extraposition sentences where non-initial  $pa\delta$  is retained, and (b) non-extraposed sentences containing a PHC in the subject position. This correlation supports the view that when the pronoun is retained, it is due to extraposition taking place out of the PHC.

Turning to the second point, we saw above in example (1b) that *fresta* 'postpone' assigns dative to its DP object when there is one. As shown in (22), this pronoun may occupy the subject position when the verb is passivized, even in non-initial contexts.

(22) Í gær var því frestað að hálshöggva fangana. yesterday was it.DAT postponed to execute the.prisoners

'Yesterday, executing the prisoners was postponed.' (Thráinsson 1979:229)

However, (1b) showed that the pronoun is optional with *fresta* 'postpone'. Thus, it is also possible to have an extraposition sentence that does not have a dative pronoun in

the subject position, as shown in (23a). However, since this pronoun is a dummy, it cannot be retained in non-initial contexts, as illustrated in (23b).

- (23) a. Það var frestað að hálshöggva fangana.
   it.NOM was postponed to execute the.prisoners
   'Executing the prisoners was postponed.' (Thráinsson 1979:228)
  - b. Í gær var (\*það) frestað að hálshöggva fangana.
     yesterday was (\*it.NOM) postponed to execute the.prisoners
     'Yesterday, executing the prisoners was postponed.' (Thráinsson 1979:229)

The source of the contrast between (23b) and (18a) is clear: the pronoun in (18a) is the same one that forms a constituent with the clause in (17a). When a non-initial pronoun is retained in extraposition contexts, it is the pronoun from the PHC. For *fresta* 'postpone', that pronoun is dative, so the nominative  $pa\delta$  in (23b) is not possible.

The third point is in fact a variant of the second point. For some verbs, the pronoun is not optional, it is obligatory. For example, *fagna* 'rejoice' requires a dative pronoun in order to take a clausal complement, as illustrated in (24a). When verbs with this property are passivized and their clauses extraposed, the pronoun in the subject position must be the dative one (or genitive, for some verbs), not the nominative one, as shown by the contrast between (24b) and (24c).

- (24) a. Ég fagna \*(því) að þú skulir vera kominn.

  I rejoice \*(it.DAT) that you should be arrived

  'I rejoice in your arrival.'
  - b. Því er fagnað að þú skulir vera kominn.it.DAT is rejoiced that you should be arrived
  - c. \* Það er fagnað að þú skulir vera kominn.

    it.NOM is rejoiced that you should be arrived (Thráinsson 1979:230)

These facts reinforce the claim above that subject extraposition may take place out of a PHC, stranding the pronoun, or not, leading to a dummy pronoun. When the PHC pronoun is obligatory in the active, the dummy pronoun is impossible in the passive.

We have seen solid evidence that (i) pronouns may form a constituent with a CP clause, and (ii) extraposition only sometimes moves a CP out of this clause; other times, the CP moves in its entirety and leaves a first-position dummy pronoun behind. Given this much, it is straightforward to show that extraction out of an extraposed CP is only banned when a PHC is involved.

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(25) a. Maríu<sub>i</sub> er hörmulegt [ að Jón skuli hafa barið t<sub>i</sub> ]
Mary.ACC is deplorable [ that John should have hit ]
'Mary, it's deplorable that John hit.' (Thráinsson 1979:195)
b. * Maríu<sub>i</sub> er það hörmulegt [ að Jón skuli hafa barið t<sub>i</sub> ]
Mary.ACC is it.NOM deplorable [ that John should have hit ]
(Thráinsson 1979:192)
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In (25a), the object *Maríu* 'Mary.ACC' has been extracted out of the embedded clause and topicalized to the matrix CP. The extraction is successful, since the CP is not at any point contained within a PHC. The absence of a PHC is verified by the fact that there is no dummy pronoun; the dummy pronoun only appears in the first position, and since the DP *Maríu* 'Mary.ACC' has moved to SpecCP, it is that DP that is in the first position, making the dummy pronoun impossible. In (25b) the pronoun is retained and the sentence is ungrammatical: the retention of the non-initial pronoun indicates extraposition out of a PHC, and PHCs are extraction islands.

By adding one more clause layer, it can even be shown that the overt presence of  $ba\delta$  is not the problem. In (26), the intermediate  $ba\delta$  is the dummy pronoun, since it is in the first position (in its clause) and extraction is possible past it.

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(26) Maríu<sub>i</sub> segir Ólafur að það sé hörmulegt
Mary.ACC says Olaf.NOM that it is deplorable
[ að Jón skuli hafa barið t<sub>i</sub> ]
[ that John should have hit ]
'Mary, Olaf says it's deplorable that John hit.' (Thráinsson 1979:197)
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Thráinsson (1979:197) sums up his conclusion as follows: "Thus, it is only the  $pa\delta$  which is unmistakably a remnant of a base generated [NP pað S] configuration which

'blocks' extraction and not just any  $ba\delta$  nor a particular semantic class of predicates."

#### 4 Back to Control Clauses

The preceding sections have presented the following picture of PHCs.

- (27) a. In PHCs, a pronoun forms a constituent with a clause.
  - b. The clause contained in PHCs may, but need not undergo extraposition.
  - c. The clause contained in PHCs is an island for extraction, regardless of whether extraposition takes place.
  - d. Subject extraposition is only sometimes derived from a PHC.
  - e. Object extraposition is always derived from a PHC.

I will now review what all of this means for D&H. D&H consider two possibilities to derive object extraposition: either the CP moves from a thematic position to adjoin to vP, or the CP is adjoined directly to the vP, associating with the pronoun in some other way. In the second option, any movement out of the CP will be sideward movement. (That is, the movement would occur before the CP adjoins to vP.) The facts reviewed above, particularly (27a), make the second choice untenable, just as much now as when Thráinsson (1979) argued in favor of a movement analysis in the theory of that time. So the PHC must be base-generated in the thematic position, and we do not need to consider the sideward movement alternative.

D&H propose that since extraposition forms an adjunct island, any movement out of the clause must occur before extraposition takes place. Extraposition is possible with control because the moving DP targets SpecvP. Once the DP moves there, the clause can move, right-adjoining to vP. Extraposition is not possible with raising because the moving DP targets SpecTP. Once the DP moves there, the clause can no longer right adjoin to SpecvP without violating the Extension Condition.

What the facts reviewed above have shown, however, is that it does not matter when extraposition happens, or what projection it targets: the PHC is an extraction island whether extraposition takes a place or not. Moving the controller out of the clause

before extraposition takes place does not help anything, because the clause is already an extraction island, before extraposition takes place. The fact that control is possible across this boundary shows that the dependency between PRO and its controller cannot be reduced to A-movement as we currently understand it. The original objection in Wood (2012) stands.

### 5 Further Issues

The preceding sections have outlined why the response in D&H will not suffice to handle the facts raised as problematic for the MTC in Wood (2012). In short, their response is based on a misunderstanding of the analysis of Icelandic object extraposition. However, D&H's reply raises a number of further issues, which I will turn to briefly in this section.

## 5.1 A'-extraction, ECM and Object Control

D&H point out that their account is incompatible with the claim that long-distance A'-movement moves successively through vP edges as well as CP edges, as required in the theory of phases since Chomsky (2001). Consider why. According to them, A-movement under raising and A'-movement in general is impossible out of extraposed clauses because the landing site of the movement is above vP—TP and CP, respectively—and vP is the target of extraposition. If A'-movement stops off at the vP edge, however, A'-extraction should be possible, since A'-extraction initially targets precisely the projection that needs to be targeted. First, a wh-element would move from the embedded CP to the vP edge. Second, the CP would extrapose, adjoining to that same vP. Third, the wh-element would continue to move from vP to the next CP. Since extraction is not possible, either the MTC is not compatible with the phasehood of vP or some other explanation must be devised.

A further problem comes from ECM constructions. It turns out that the MTC is also incompatible with Chomsky's (2008) analysis of ECM as raising-to-object. In brief, Chomsky (2008) proposes that in ECM constructions, V inherits  $\phi$ -features from v\*, agrees with the embedded subject and remerges the embedded subject its specifier.

In fact, there is long-standing empirical evidence in favor of the claim that ECM constructions involve raising-to-object, going back at least to Postal (1974).

Thráinsson (1979) argues that this is correct for Icelandic as well. In (28), *mig* 'me.ACC' has raised into the matrix VP, as evidenced by the fact that it occurs to the left of the PP *i barnaskap sínum* 'in his foolishness'. We know that the PP is in the matrix clause because it contains a clause-bounded reflexive *sínum*. Moreover, *mig* 'me.ACC' must have raised into the VP; it cannot have raised by Object Shift (to, say, SpecAgrOP, above vP), because Object Shift is not possible in contexts with a perfect auxiliary, as is well known. Therefore, all indications are that *mig* 'me.ACC' has raised into the matrix vP, but no higher. D&H's explanation for the impossibility of extraposition following A-movement in raising clauses was that such raising targets a position higher than vP. Under this explanation, it should be possible to raise-to-object, and then extrapose. As shown in (28), this is not possible (even though object control into a PHC is possible, as shown in (33b) below).

(28) Hann<sub>i</sub> hefur alltaf talið mig í barnaskap sínum<sub>i</sub> (\*það) vera prest. he has always believed me in foolishness REFL (\*it.ACC) be priest 'He has always believed me in his foolishness to be a priest.'

The problem is that the MTC wants to make the dependencies established in raising and control differ only in terms of the region of the clause that the landing site occupies. Thus, if when raising involves movement to the same region of the clause, the locality of raising and control should be the same. Remaining differences might be attributable to different properties of the landing site, but that is not what D&H say about the differences with respect to extraposition. They are explicit: if the landing site is vP or lower, extraposition should be possible. Thus, their account is incompatible with a raising-to-object analysis of ECM. To keep the MTC, we must reject vP phases and raising-to-object, and find other explanations for the facts that motivate them.<sup>7</sup>

### 5.2 'Promise' verbs

D&H also discuss 'promise'-type verbs, which seem to be problematic for the MTC.

(29) John<sub>i</sub> promised Mary<sub>j</sub> [PRO<sub>i/\*j</sub> to leave].

In (29), *John* controls PRO despite the fact that *Mary* seems to intervene, in violation of the Minimal Distance Principle of Rosenbaum (1967). In response to Ndayiragije (2012), D&H cite the solution to this problem proposed in Hornstein (2001) and Boeckx and Hornstein (2003:274), which is to suppose that *Mary* is contained in a PP headed by a null preposition. The ability of *John* to move past *Mary* in 'promise'-type verbs is thus collapsed with the ability of *John* to move past the PP *to Mary* in raising verbs.

(30) a. John promised [PP P(=Ø) Mary ] [John to leave].
b. John seemed [PP P(=to) Mary ] [John to be the best].

This explanation cannot extend to Icelandic 'promise'-type verbs.<sup>8</sup> In Icelandic, both the DP object of *lofa* 'promise' and the experiencer of *virðast* 'seem' are dative DPs. Unlike English, however, the experiencer cannot be skipped by A-movement—it is the experiencer that A-moves to the subject position, as is well known.

- (31) a. Mér<sub>i</sub> hefur alltaf virst  $t_i$  [ Jón vera klár ]. me.DAT has always seemed [ John.NOM be clever ] 'John has always seemed to me to be clever.'
  - b. \* Jón hefur alltaf virst mér [ $t_i$  vera klár].

    John.NOM has always seemed me.DAT [be clever]

The 'promisee' of *lofa* 'promise' is demonstrably unskippable as well. When it takes two DP objects, both objects are marked dative, as shown in (32a). In the passive, it is the higher object, which expresses the person receiving the promise, that A-moves to the subject position. This object may not be skipped by the lower object.<sup>9</sup>

- (32) a. Þeir hafa lofað bændunum peningunum. they have promised the farmers DAT the money. DAT 'They have promised the farmers the money.'
  - b. Bændunum $_i$  hefur verið lofað  $t_i$  peningunum. the.farmers.DAT have been promised the.money.DAT 'The farmers have been promised the money.' (Thráinsson 2007:240)

c. \* Peningunum $_i$  hefur verið lofað bændunum  $t_i$ . the.money.DAT has been promised the.farmers.DAT INTENDED: 'The money has been promised to the farmers.'

Based on the fact that argumental dative DPs in general, and the object of *lofa* 'promise' in particular, cannot be skipped by A-movement, the MTC would lead us to expect that 'promise'-type control is not possible in Icelandic. This is incorrect. Icelandic behaves exactly like English. Either the subject can be the controller, as shown in (33a), or the object can be the controller, as shown in (33b); this is exactly like English, as indicated in the translations. Note also that a PHC is possible in both cases.

- (33) a. Jón<sub>i</sub> lofaði mér<sub>j</sub> [ (því) [ að PRO<sub>i</sub> berja mig ekki aftur ]]. John.NOM promised me.DAT [ (it.DAT) [ to beat me not again ]] 'John promised me to not beat me again.'
  - b.  $Jón_i$  lofaði mér $_j$  [ (því) [ að PRO $_j$  fá að fara bráðum ]]. John.NOM promised me.DAT [ (it.DAT) [ to get to leave soon ]] 'John promised me to be allowed to leave soon.'

To derive (33a), the MTC would require A-movement of *Jón* past *mér* 'me' (as well as the pronoun when it is present), and there is no reason to believe that this is possible.

Finally, it is worth pointing out that exactly like English, passives in Icelandic disambiguate the object and subject control readings. The implicit agent cannot control PRO when the object moves to the subject position.<sup>10</sup>

- (34) a. \* Mér<sub>i</sub> var lofað [ (því) [ að PRO<sub>j</sub> berja mig ekki aftur ]]. me.DAT was promised [ (it.DAT) [ to beat me not again ]] Like English: '\*I was promised not to beat me again.'
  - b. Mér<sub>i</sub> var lofað [ (því) [ að PRO<sub>i</sub> fá að fara bráðum ]]. me.DAT was promised [ (it.DAT) [ to get to leave soon ]] 'I was promised to be allowed to leave soon.'

That is, there is no relevant difference between Icelandic and English 'promise'-type verbs except that (a) dative case is retained (a general difference between passives of indirect objects in Icelandic and English), (b) a PHC is possible (a general

difference between Icelandic and English control infinitives) and (c) the explanation for 'promise'-type verbs given by Hornstein (2001), Boeckx and Hornstein (2003) and D&H does not work for Icelandic.

#### 5.3 Structural versus non-structural case

The last point I would like to make regards the approach to case agreement found in D&H. As background, Wood (2012) states that Boeckx et al. (2010a,b) had not responded to the strongest argument against the claim that when PRO seems to be nominative, it has all the properties of an ordinary, structural nominative (Sigurðsson 2008; Bobaljik and Landau 2009). Here it will help to refer to some concrete examples. In (35a), we see that the passive participle agrees with the nominative derived subject in gender, number and case; the default form is not possible. (35b) shows that the same holds when the subject is PRO, even with a non-nominative controller. (36a) shows that the passive participle cannot agree with the dative derived subject; it must be in the default form. (36b) shows that the same holds when the subject is PRO.

- (35) a. Hún var { \*aðstoðað / aðstoðuð }.

  she.NOM was { \*assisted.DFLT / assisted.F.SG.NOM }

  'She was assisted.'
  - b. Henni líkaði illa að PRO vera
    her.DAT liked poorly to PRO.F.SG.NOM be

    { \*aðstoðað / aðstoðuð }.

    { \*assisted.DFLT / assisted.F.SG.NOM }

    'She disliked being assisted.'
- (36) a. Henni var { hjálpað / \*hjálpuð / \*hjálpaðri }.

  her.DAT was { helped.DFLT / \*helped.F.SG.NOM / \*helped.F.SG.DAT }

  'She was helped.'
  - b. Henni líkaði illa að PRO vera her.DAT liked poorly to PRO.DAT be

```
{ hjálpað /*hjálpuð /*hjálpaðri }.
{ helped.DFLT /*helped.F.SG.NOM /*helped.F.SG.DAT }
'She disliked being helped.'
```

Boeckx and Hornstein (2006) claimed that agreement with passive participles can only take place with elements bearing structural Case. However, this would seem to suggest that PRO bears structural Case in (35b). As pointed out by Sigurðsson (2008:419): "what matters here is that the Icelandic nominative is evidently *the same case* in infinitives as in finite clauses" (original emph.). These facts would then seem to undermine the view that in (35b), PRO is Caseless and must move to the matrix clause to get Case. The starting point in Wood (2012), then, was to suppose that we might drop the view that movement is Case-driven in the first place, and instead ask whether control could still be movement if movement was driven in some other way. The answer, of course, was no: the locality domains of movement and control are distinct. Control is possible into domains out of which no known movement is possible; control, simply speaking, does not show the signature properties of a movement dependency. This view is maintained and strengthened by the considerations in the rest of the present article.

D&H, however, respond by laying out a more explicit account of how they can derive the agreement patterns in (35) and (36) while maintaining the assumption that movement is Case-driven. Their claim is that in (35b), PRO is has no Case, but it may still agree with the participle in number and gender features. At PF, a participle with number and gender features, but no Case feature, is realized as nominative by default. In (35a), there are two possibilities. The first is that the subject might have a structural nominative Case feature and agree with the participle in Case, number and gender. The second is that nominative is always the elsewhere, default realization of participles without Case features, so that there is no nominative feature in (35a) either. In (36), D&H suppose that both PRO in (36b) and the overt subject in (36a) have quirky dative Case, and propose that participles simply do not agree with quirky Case-marked DPs. The default form is the realization of a participle with no φ-features at all.

Now, the way that the MTC works is to make a distinction between structurally Case marked elements and quirky-Case marked elements. It is straightforward for the theory to admit that PRO may have quirky Case, but that it must keep moving to get structural Case. The claim is that PRO can never be structurally Case marked. How can this be tested? Is there any linguistic means of determining whether PRO ever has structural Case? Initially, it seemed that there was, because quirky Case and structural Case are readily distinguishable in Icelandic, primarily by agreement patterns like those outlined in (35) and (36). But the facts showed that by all available diagnostics, PRO seems to be able to bear structural Case—nominative in particular. It is important to note that it is not just nominative that is at issue. Structural accusative behaves just like nominative in forcing agreement with passive participles.

```
Ég
(37)
                    taldi
                                      hafa verið
       a.
                             hana
             I.NOM believed her.ACC have been
             { *aðstoðað
                              / aðstoðaða
                                                   }.
             { *assisted.DFLT / assisted.F.SG.ACC }
             'I believed her to have been assisted.'
             Ég
       b.
                    taldi
                             henni
                                     hafa verið
             I.NOM believed her.DAT have been
             { hjálpað
                            / *hjálpaða
                                                / *hjálpaðri
                                                                    }.
             { helped.DFLT / *helped.F.SG.ACC / *helped.F.SG.DAT }
             'I believed her to have been helped.'
```

What the proposal in D&H does, essentially, is work out an analysis where the distinction between structural and non-structural Case can no longer be tested. The rules for agreement that they propose are that structurally Case-marked DPs and non-Case-marked DPs agree with passive participles, while non-structurally Case-marked DPs do not. Now, D&H (pp. 14) note that their analysis "leave[s] it an open question whether Icelandic has any syntactic nominative at all." The view that there is no syntactic nominative might seem appealing, since there is, according to the analysis, no morphological evidence for a nominative Case feature. However, removing

nominative from their system does not remove the strange duality of agreement patterns (where structural Case and non-Case go together, to the exclusion of non-structural Case), since accusative behaves like nominative.

One could posit that in fact, there is no syntactic accusative feature either, and that the distribution of nominative and accusative features is determined post-syntactically. This is in fact well-motivated and has been an established view going back to Yip et al. (1987), Marantz (1991/2000), McFadden (2004), Sigurðsson (2006) and others. The generalization could then be that participles share φ-features with nominative and accusative because these are indistinguishable in the syntax.

Whichever approach we take, it would seem that the question of whether PRO can ever bear structural Case has become impossible to test. Either structurally Case-marked DPs are indistinguishable from non-Case-marked DPs by all diagnostics, or else there are no syntactic structural Case features, in which case movement to get such features makes no sense. To put it another way, the MTC claimed that control dependencies are established by the need for PRO to move to get structural Case. Fleshing out the details of this claim with respect to the Icelandic data has led to the very notion of structural Case being undiagnosable. So either PRO may bear structural Case, and the Case-driven aspect of the MTC is wrong, or we cannot tell whether PRO bears structural Case, and the Case-driven aspect of the MTC is unmotivated. At any rate, the present article makes a stronger claim: control dependencies are not established by movement at all, since such dependencies cross boundaries that no other movement can cross.

### 6 Conclusion

This article has shown that object extraposition remains a problem for the MTC. As argued by Thráinsson (1979), object extraposition is derived from a 'pronoun-headed clause' (PHC), a structure where a pronoun forms a constituent with a clause. Movement out of a PHC is impossible regardless of whether extraposition takes place or not. D&H's attempt to account for the Icelandic facts on the basis of the landing site of extraposition cannot succeed, because the PHC is an island before extraposition takes

place, and even if it does not take place. Despite the fact that movement dependencies cannot reach inside PHCs, control dependencies can. The conclusion is that the locality for control is not the same as the locality for movement.

I have furthermore shown that D&H's reply to Ndayiragije (2012) cannot be extended to Icelandic 'promise'-type verbs. If we take the locality of A-movement seriously—something that is well-understood for Icelandic—then there is no explanation for why subject control is possible past an object with 'promise'-type verbs. The object in question is an ordinary dative DP that undergoes ordinary A-movement, and blocks A-movement of DPs past it. If we truly want to understand the various dependencies encoded in natural language, we cannot conclude that control and A-movement dependencies are collapsed. Their locality properties are just not the same. Notes

<sup>1</sup>The pronoun occurs in the following forms: *það* 'nominative/accusative' (syncretic), *því* 'dative', *þess* 'genitive'.

<sup>2</sup>Abbreviations used in glossing: ACC-accusative, DAT-dative, EXPL-expletive, FEM-feminine, GEN-genitive, INF-infinitive, MASC-masculine, NOM-nominative, SBJV-subjunctive, SG-singular.

<sup>3</sup>Note, moreover, that according to Thráinsson (1979:279), a pronoun referring to an infinitive clause is in fact possible, *pace* Ott (2013).

(i) A: Hætti Jón að reykja? B: Já, hann hætti því.
stopped John to smoke yes, he stopped it.DAT
'Did John stop smoking?' 'Yes, he stopped.'

<sup>4</sup>Thráinsson (1979) uses the notation [ $_{NP}$  það S ] for his claim; I will assume that the constituent is [ $_{DP}$  það CP ] (see also Fischer 2013), but nothing hinges on this.

<sup>5</sup>Thanks to Höskuldur Thráinsson and Anton Karl Ingason for judgments of these examples. Anton Karl Ingason finds the contrastive dislocation examples better with a focus particle like *einmitt* 'exactly', and Höskuldur Thráinsson emphasizes that the pronoun must be contrastively focused in this construction. In some cases, the

Icelandic sentences do not translate naturally into English sentences with similar fronting operations, so I opt for a translation without such fronting. The point, of course, is what Icelandic fronting shows about constituency.

<sup>6</sup>Ott (2013) claims that extraposed infinitives are not a problem for the MTC under an analysis which treats extraposition as right dislocation, and a biclausal analysis of right dislocation at that. First of all, Thráinsson (1979) carefully distinguishes between these constructions and right dislocation constructions, and they have distinct prosodic and syntactic properties. So Ott's claim is almost certainly not correct in the general case. Second, Ott (2013:3) is incorrect when he states that his argument "holds as long as the Right-dislocation parse is available," given a situation where the sentences are "derivationally ambiguous." It is the other way around: if there is a parse which cannot be analyzed as right dislocation—or even as object extraposition at all—and extraction is not possible while control is, then the argument against the MTC goes through.

<sup>7</sup>See also van Urk and Richards (to appear) for recent evidence that DPs undergoing A'-movement do move through vP edges.

<sup>8</sup>Thanks to E.F. Sigurðsson for discussion of the facts in this section.

<sup>9</sup>See Zaenen et al. (1985) and Wood and Sigurðsson (to appear), inter alia.

<sup>10</sup>At first glance, it would seem as though these facts are counter-examples to van Urk's (2013) claim (based on Landau's (2000) system) that effects like this are limited to cases where T agrees with an overt DP. In (34), the subject is dative, so T has default agreement. However, there are actually reasons to think that T does abstractly agree with non-nominative subjects in Icelandic (in at least some features), and this has been proposed numerous times, for example by Boeckx (2000), Anagnostopoulou (2003), Schütze (2003), Koopman (2006) and Sigurðsson and Holmberg (2008). Under this hypothesis, the Icelandic facts are exactly as van Urk (2013) would expect them to be.

<sup>11</sup>The default form is the same form as 3rd person singular neuter.

<sup>12</sup>D&H discuss examples with predicate adjectives, which agree in the same way that passive participles do, so the point here is the same.

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