

AGAINST THE MOVEMENT THEORY
OF CONTROL: ANOTHER
ARGUMENT FROM ICELANDIC

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In this squib, I present an empirical argument from Icelandic that the movement theory of control (MTC) is on the wrong track—or at best, does not achieve what it purports to achieve. I depart from previous discussion, which has focused on the fact that Icelandic PRO bears case, and show that the MTC would require violating locality constraints on A-movement that raising infinitives do not violate. Since the goal of the MTC is to account for the properties of control sentences on the basis of mechanisms independently needed within the Minimalist Program, this difference in the locality domains of raising and control dependencies constitutes another challenge for the MTC.

1 Movement versus Case-Driven Movement

The conclusion from the recent debate on Icelandic obligatory control (OC) (Boeckx and Hornstein 2006, Sigurðsson 2008, Bobaljik and Landau 2009, Boeckx, Hornstein, and Nunes 2010b) is often taken to be that Icelandic shows that OC is not movement. However, this is not quite accurate. What Icelandic shows is that control is not Case-driven movement (unless Case has nothing to do with case). This is so for two reasons. First, in their reply to Bobaljik and Landau (2009), Boeckx, Hornstein, and Nunes (2010b) fail to address the strongest argument against Case-driven movement: that the nominative case borne by PRO is the same structural nominative as that seen in finite clauses, even by Boeckx and Hornstein's (2006) criteria (including, crucially, full agreement with passive participles).¹ No convincing reason to believe otherwise has been presented.

Second, even in their own analysis, Boeckx, Hornstein, and Nunes (2010b) make it clear that it is agreement with a ϕ -complete probe that is important, not Case valuation. The need to enter an Agree relation with a ϕ -complete probe is what drives movement of ‘quirky’-Case-marked DPs into θ -positions (under Enlightened Self-

Unless otherwise noted, the Icelandic data in this squib come from my own fieldwork with Icelandic speakers in New York City, primarily Björg Jóhannsdóttir and Erla Skúladóttir. I would like to thank them for their time and patience in working with me, as well as Ásgrímur Angantýsson, Einar Freyr Sigurðsson, Halldór Ármann Sigurðsson, Theódóra A. Torfadóttir, and Thórhallur Eythórsson for discussing some sentences with me. Finally, I would like to thank Halldór Ármann Sigurðsson and the anonymous *LJ* reviewers for their very helpful comments and suggestions, which have greatly improved this squib.

¹ Boeckx and Hornstein 2006:592–593: ‘‘Overt morphological agreement on finite verbs (person, number) and passive past participles (Case, number, gender) can only take place with elements bearing structural Case.’’ Such past participles do occur in control infinitives and agree with PRO, leading to the conclusion that it is structurally Case-marked (see Sigurðsson 2008:419, Bobaljik and Landau 2009:123). Boeckx, Hornstein, and Nunes 2010a is similarly silent on this issue.

Interest; Hornstein 1999), and movement into θ -positions wipes out the Case value of the moving DP.²

Therefore, a notational variant of Boeckx, Hornstein, and Nunes's (2010b) analysis might say that DPs need “ ϕ -complete valuation” rather than Case valuation, and then draw some strong formal connection between certain morphological case values and agreement with different ϕ -complete probes, while maintaining the position that control sentences are derived by A-movement. While raising and control would then be similar in that they both involve A-movement out of an infinitive, they would differ precisely where Boeckx, Hornstein, and Nunes (2010a,b) claim they do: only the latter involves movement into a θ -position. This claim might seem unfalsifiable, as has been noted (see Sigurðsson 2008:418–419), but it could, in principle, be correct.

2 Not (Any Familiar Kind of) Movement

However, I will argue that even this version of the MTC cannot be right for Icelandic. The facts leading to this conclusion have to do with the locality domains for movement rather than the question of PRO being case-marked. It can be shown that if control were movement, it would in some cases involve movement out of a domain from which no other kind of movement can take place, whether A-movement or \bar{A} -movement.

Icelandic control infinitives can often occur with an optional (case-marked) pronoun *það* ‘it’, a construction analyzed by Thráinsson (1979:110–111) as object extraposition (1).³

- (1) Þeir ákváðu (það) að PRO heimsækja
 they.MASC.NOM decided (it.ACC) to visit
 Ólaf.
 Olaf.ACC
 ‘They decided to visit Olaf.’

As Thráinsson shows, \bar{A} -extraction can occur out of a control clause only when *það* is not present, as illustrated for topicalization in (2).

- (2) Ólaf_i ákváðu þeir (*það) að PRO
 Olaf.ACC_i decided they.MASC.NOM (*it.ACC) to
 heimsækja t_i.
 visit t_i
 ‘Olaf, they decided to visit.’

² In some sense, then, the movement derivation of control sentences can be “anti-Case-driven,” since such movement wipes out a Case feature value that has previously been established.

³ Abbreviations used in glossing: ACC—accusative, DAT—dative, EXPL—expletive, FEM—feminine, GEN—genitive, INF—infinitive, MASC—masculine, NOM—nominative, SBJV—subjunctive, SG—singular.

We thus see a case where \bar{A} -extraction is impossible out of a control clause—a case that under the MTC would have to allow A-movement out of that same clause. A-movement past this pronoun would be unexpected. If the pronoun is the head of the clause (e.g., a D taking a CP sister), then A-movement out of the clause would involve an A-over-A violation. If the pronoun is not the head of the clause (e.g., a DP in Spec,CP), then A-movement past it would violate Minimality; assuming that the pronoun c-commands the moving DP/PRO, it would thus be closer to any landing site than the latter.

It has been pointed out in connection with this that standard raising infinitives do not allow *það* (Andrews 1990, Roehrs 2005), presumably at least in part for the reason just cited.

- (3) Hún_i virðist (*það) t_i elska Svein.
 she.NOM_i appeared (*it.ACC) t_i love Sveinn.ACC
 ‘She appeared to love Sveinn.’

However, there is another difference between the structure of these raising infinitives and that of control infinitives: the former lack the complementizer *að* ‘to/that’, and it could be claimed that this independent difference might explain the impossibility of the optional pronoun. However, this is refuted by aspectual verbs, which, as shown by Sigurðsson (1989:68–71), are like standard raising verbs in that they preserve the “quirky” case assigned by the embedded verb (see also Thráinsson 1986). In (4), the embedded verb *leiðast* ‘bore’ assigns dative case to its subject, which is preserved under A-movement past the aspectual verb.

- (4) Mér byrjaði að leiðast.
 me.DAT began to bore
 ‘I began to feel bored.’

These aspectuals do not allow an extraposition *það* either, so its impossibility in (3) cannot be directly attributed to the lack of the infinitive marker *að*.

- (5) *Haraldur byrjaði það að senda henni bréf.
 Harold.NOM began it.ACC to send her.DAT letters.ACC
 Intended: ‘Harold began to send her letters.’

The impossibility of an optional pronoun in raising contexts suggests that standard Case-driven A-movement is not possible past such a pronoun. This is consistent with the fact that A-movement is in general governed by stricter locality constraints than \bar{A} -movement.

3 Options for the MTC

Since neither \bar{A} -movement nor A-movement (of the sort seen in raising infinitivals) is possible past the optional pronoun, the MTC would seem to have two options for analyzing sentences like (1) when the pronoun is present.⁴ First, one could tie the availability of movement

⁴ I am grateful to the *LJ* reviewers for raising these possibilities.

past the pronoun in control sentences to the fact that it is targeting a θ -position. Second, one could analyze such cases as instances of nonobligatory control (NOC), which in the MTC involves a null *pro* that is not related to its antecedent by movement (Boeckx, Hornstein, and Nunes 2010a:195ff.). In this section, I will claim that the first option is untenable and the second has no independent support.

Turning to the first possibility, one might suppose that the optional pronoun is nonthematic.⁵ Thus, A-movement past it might be possible if such movement were thematically driven, rather than Case-driven. This would explain why standard raising contexts do not allow such a pronoun while control contexts do. However, the serious problem faced by this approach, from the standpoint of the MTC, is that this pronoun can show up with “quirky” dative or genitive case, and the same paradigm obtains (Thráinsson 1979:110–111, 228–229). In (6), the optional pronoun is dative, and, as (7) shows, extraction is still impossible when it is present.

- (6) Þeir frestuðu (því) að PRO hálshöggva
 they.MASC.NOM postponed (it.DAT) to execute
 fangana.
 the.prisoners.ACC
 ‘They postponed executing the prisoners.’
- (7) Fangana_i frestuðu þeir (*því)
 the.prisoners.ACC_i postponed they.MASC.NOM (*it.DAT)
 að PRO hálshöggva t_i.
 to execute t_i
 ‘The prisoners, they postponed executing.’

This is a problem because the MTC crucially ties Icelandic “quirky” case to θ -positions. The reason that a PRO—or DP—trace, in the MTC—can have a different case from the controller is that control involves movement into a θ -position, θ -positions are involved in assigning “quirky” Case, and so the Case value of the moving DP is wiped out when it moves into a θ -position. But this account of “quirky” case and the distribution of case in control clauses leads to the conclusion that the optional pronoun in (6) is in a θ -position. This is further supported by the fact that the choice of case on the pronoun depends on the lexical verb (dative for *fresta* ‘postpone’, accusative for *ákveða* ‘decide’, etc.); *fresta* ‘postpone’ marks nonclausal direct objects in the dative as well (example from Thráinsson 1979:228).

⁵ An anonymous reviewer points out that this supposition is potentially supported by the fact that the pronoun cannot be contrastively focused. However, that fact could have a number of explanations independent of thematicity, if the latter is dissociated from referentiality and/or the possibility of generating a set of alternatives, as seems likely.

- (8) Bóðullinn frestaði aftökunni.
 the.executioner.NOM postponed the.execution.DAT
 ‘The executioner postponed the execution.’

Therefore, one cannot say that movement past the pronoun is possible because the latter is nonthematic—it appears to be thematic insofar as its case marking is considered (and case marking is the domain of thematicity that is relevant to the MTC’s explanation of the Icelandic facts).

The second possibility open to the MTC is to analyze the examples with the optional pronoun as NOC. In this case, they simply would not be relevant to the MTC, since as noted by Boeckx, Hornstein, and Nunes (2010a:195), the analyses of OC and NOC do not, in principle, need to be unified. To see this, consider the English examples in (9).⁶

- (9) a. [Olaf’s_i therapist]_j decided PRO_{*i/j} to give up vodka.
 b. [Olaf’s_i therapist]_j decided on PRO_{i/j} giving up vodka.
 c. What_k did [Olaf’s_i therapist]_j decide on PRO_{*i/j} giving up t_k?

In (9a), which exemplifies OC, PRO cannot be controlled by the non-c-commanding antecedent *Olaf*. (9b), however, has in addition a reading where the therapist decided that giving up vodka was the best course of action for Olaf. This kind of control by a non-c-commanding antecedent is a diagnostic for NOC. However, when a *wh*-phrase is extracted, as in (9c), this reading is lost. A possible explanation for this fact is that (9b) is ambiguous between OC and NOC, but that extraction is only possible in OC contexts; so (9c), with extraction, only allows the OC reading/structure. Extending this reasoning to the Icelandic data in (1) and (6) would involve saying that the optional pronoun is only compatible with NOC structures; thus, extraction is impossible.

This possibility is hard to refute completely, since the NOC readings are generally a superset of OC readings. However, it should be pointed out in this respect that sentences with the optional pronoun do not pass positive tests for NOC. First, the sentence in (10) only allows a reading where the therapist quits drinking.

- (10) [Sálfræðingur Jóns_i]_j ákvað það að PRO_{*i/j} hætta
 [therapist Jon.GEN_i]_j decided it.ACC to quit
 að drekka.
 to drink
 ‘Jon’s therapist decided to quit drinking.’

That non-c-commanding antecedents of this sort generally cannot control PRO in these constructions is supported by (11). The floating quantifier *einn* ‘alone’ agrees with PRO in number, gender, and case.

⁶ I thank an anonymous reviewer for constructing these examples.

- (11) *[Móðir Jóns]_i ákvað það að PRO_{*i/j} fara
 [mother Jon.GEN]_i decided it.ACC to go
 einn.
 alone.MASC.NOM.SG

PRO would pick up its number and gender features from its controller, and its case clause-internally. If *Jóns* could serve as a non-c-commanding controller of PRO, the floating quantifier *einn* would be grammatical, with the reading that Jon's mother decided that he would go alone, contrary to fact. In cases of NOC, however, the form of the quantifier can vary with the intended referent of PRO. It can be 'speaker-inclusive,' in Sigurðsson's (2008:424) terms, so that a female speaker can use the feminine form and a male speaker the masculine form.⁷

- (12) Það er ekki alltaf leiðinlegt að PRO ferðast
 EXPL is not always boring to travel
 {einn/ein}.
 alone.{MASC/FEM}
 '(Me) traveling alone is not always boring.'

In NOC contexts such as this one, the form of the quantifier can vary, unlike in (11), where only the thematic subject of the matrix verb can determine the number and gender features of PRO and the quantifier. Similarly, in the NOC sentence in (13), either the c-commanding *faðir Maríu* 'Mary's father' or the non-c-commanding *Maríu* 'Mary's' can control PRO, with concomitant differences in the availability of masculine and feminine quantifier forms.

- (13) Faðir Maríu ákvað að það væri hættulegt
 father Mary.GEN decided that EXPL was.SBJV dangerous
 að PRO ferðast {einn/ein}.
 to travel alone.{MASC/FEM}
 'Mary's father decided that it would be dangerous to travel alone.'

Second, PRO cannot be controlled long-distance in cases like (1) and (6), whether the pronoun is present or not. In (14), the embedded reciprocal requires a plural, feminine, local antecedent. Since *þær* 'they.FEM.NOM' cannot control PRO to provide one—only *þjálfarinn* 'the coach' can control PRO—the sentence is ungrammatical.⁸

⁷ However, the masculine form is also a default form here, so it could also be used by a female speaker or when the referent of PRO is female.

⁸ Thanks to Halldór Ármann Sigurðsson (pers. comm.) for helping me refine the examples in (14) and (15). An anonymous reviewer finds the example in (i) deviant, but not ungrammatical. My nonlinguist informants find (i) completely unacceptable, as do Einar Freyr Sigurðsson, Halldór Ármann Sigurðsson, Theódóra A. Torfadóttir, and Þórhallur Eythórsson. Ásgrímur Angantýsson (pers. comm.) finds the sentence very odd, but not necessarily fully ungrammatical. As far as I know, every speaker finds (i) worse than the acceptable sentence in (ii).

- (14) *Þær héldu að þjálfarinn hefði ákveðið
 they.FEM.NOM thought that the.coach had.SBJV decided
 það að PRO hrinda hver annari.
 it.ACC to push each other.FEM.DAT

In contrast, the NOC sentence in (15) allows *þær* ‘they.FEM.NOM’ to control PRO long-distance.

- (15) Þær héldu að þjálfarinn hefði sagt
 they.FEM.NOM thought that the.coach had.SBJV said
 að það væri bannað að PRO hrinda
 that EXPL was.SBJV banned to push
 hver annari.
 each other.FEM.DAT
 ‘They thought that the coach had said that pushing each
 other was not allowed.’

Third, there is no alternation between a null pronoun and an overt argument the way there is with at least some NOC contexts (see (16b)).

- (16) a. *Þær ákváðu það að Jón fara
 they.FEM.NOM decided it.ACC to Jon leave.INF
 strax.
 immediately
 b. They decided on John(’s) leaving immediately.

As pointed out by an anonymous reviewer, the impossibility of (16a) does not make the strongest argument, since infinitives headed by *að* never allow an overt subject in Icelandic.⁹ However, the general point is that there does not seem to be any positive evidence that sentences

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- (i) *Þær héldu að Jón hefði ákveðið það að PRO
 they.FEM.NOM thought that Jon had.SBJV decided it.ACC to
 berja hver aðra.
 beat each other.FEM.ACC
- (ii) Þær héldu að Jón hefði sagt að það væri
 they.FEM.NOM thought that Jon had.SBJV said that EXPL was.SBJV
 bannað að PRO berja hver aðra.
 banned to beat each other.FEM.ACC
 ‘They thought that Jon had said that beating each other was not
 allowed.’

⁹ However, it is worth pointing out that experiencer raising infinitives do allow an overt subject to remain within the infinitival clause, as illustrated by the following example from Sigurðsson 2012:(56c):

- (i) Hafði þér virst [hún vera hæf]?
 had you.DAT seemed she.NOM be.INF competent.FEM.SG.NOM
 ‘Did she seem competent to you?’

Since overt nominative subjects can occur in infinitive clauses (albeit not in *að*-infinitives), the impossibility of (16a) should not be taken to be self-evident; rather, it requires some explanation.

like (1) and (6) involve NOC. Therefore, the problem of accounting for the silence, distribution, and interpretation of PRO remains for such cases.

4 Discussion and Conclusion

The main goal of the MTC is to understand the silence and interpretation of PRO in terms of mechanisms that are independently needed: interpretation comes from θ -positions, and PRO is silent because of chain reduction of A-chains; copies of A-moved elements are usually silent. The facts presented here show that this account of the silence of PRO cannot work in general without saying that the locality domain for A-movement into a θ -position is different from the domain for A-movement into a non- θ -position. This movement would violate either the A-over-A Principle, if the optional pronoun is taken to head the infinitive, or Minimality, if the pronoun occupies a position outside of the infinitive.

The domains of control dependencies in these cases are more reminiscent of those spanned between overt pronouns and their antecedents than of those spanned by A-movement relations; a movement approach to control like that found in Kayne 2002 is conceivable, though we still need an account of when, where, and why PRO is silent.¹⁰ Therefore, even if control is movement, we cannot simply account for it on the basis of independently understood principles, as the MTC aims to do. Even if these facts were derivable on the movement approach—for example, by moving the embedded DP out of the infinitive before extraposition—why extraction is not possible would be a mystery.

This argument from locality is independent of the question of whether the landing site is a θ -position or not, which, according to Boeckx, Hornstein, and Nunes (2010b:112), is the “single difference” that “should underlie the reported differences between control and raising.” It is not at all clear how one could exploit a θ -position landing site to account for this locality difference, especially given that the pronoun is apparently thematic in the relevant way.¹¹ The conclusion

¹⁰ In Kayne’s (2002) approach, all pronoun-antecedent relations involve movement. The relation between *John* and *he* in *John_i thinks he_i is smart* arises when the two form a constituent in the embedded clause before *John* moves to the matrix clause. Similarly, in control contexts, *John* and PRO form a constituent before *John* moves to the matrix clause. Since both involve movement of a DP out of a complex DP, the two constructions—pronoun-antecedent and PRO-antecedent—are similarly derived. This analysis, if correct, entails a reworking of commonly assumed constraints on movement and is thus compatible with the text claim that we have not yet achieved an understanding of OC in terms of independently understood mechanisms.

¹¹ This is especially true for subject control, where movement into the external argument position is within the same phase domain as movement to (e.g.) matrix Spec,TP, both positions being accessible in the computation when the next phase head is merged.

drawn here is a conservative one, but an important one: we do not yet fully understand the difference between raising and control, and we cannot account for the properties of control constructions on the basis of mechanisms independently needed for A-movement.

References

- Andrews, Avery. 1990. Case structures and control in Modern Icelandic. In *Modern Icelandic syntax*, ed. by Joan Maling and Annie Zaenen, 427–503. New York: Academic Press.
- Bobaljik, Jonathan David, and Idan Landau. 2009. Icelandic control is not A-movement: The case from case. *Linguistic Inquiry* 40: 113–132.
- Boeckx, Cedric, and Norbert Hornstein. 2006. Control in Icelandic and theories of control. *Linguistic Inquiry* 37:591–606.
- Boeckx, Cedric, Norbert Hornstein, and Jairo Nunes. 2010a. *Control as movement*. Cambridge: Cambridge University Press.
- Boeckx, Cedric, Norbert Hornstein, and Jairo Nunes. 2010b. Icelandic control really is A-movement: Reply to Bobaljik and Landau. *Linguistic Inquiry* 41:111–130.
- Hornstein, Norbert. 1999. Movement and control. *Linguistic Inquiry* 30:69–96.
- Kayne, Richard. 2002. Pronouns and their antecedents. In *Derivation and explanation in the Minimalist Program*, ed. by Samuel David Epstein and T. Daniel Seely, 133–166. Oxford: Blackwell.
- Roehrs, Dorian. 2005. Icelandic case fluctuation and movement into theta-positions. In *The view from Arjona*, ed. by Masashi Nomura, Fumikazu Niinuma, and Lara Reglero, 195–229. University of Connecticut Working Papers in Linguistics 13. Available at <http://www.sp.uconn.edu/~li101is1/PDF/roehrs.pdf>.
- Sigurðsson, Halldór Ármann. 1989. Verbal syntax and case in Icelandic. Doctoral dissertation, University of Lund.
- Sigurðsson, Halldór Ármann. 2008. The case of PRO. *Natural Language and Linguistic Theory* 26:403–450.
- Sigurðsson, Halldór Ármann. 2012. Minimalist C/case. *Linguistic Inquiry* 43:191–227.
- Thráinsson, Höskuldur. 1979. On complementation in Icelandic. Doctoral dissertation, Harvard University, Cambridge, MA.
- Thráinsson, Höskuldur. 1986. On auxiliaries, AUX and VPs in Icelandic. In *Topics in Scandinavian syntax*, ed. by Lars Hellan and Kirsti Koch Christensen, 235–265. Dordrecht: Reidel.