Chapter 11

On a "make-believe" argument for Case Theory

Jonathan David Bobaljik

University of Connecticut

I argue here that evidence from Icelandic challenges one argument for Case Theory given in Chomsky's seminal paper *On Binding*. Chomsky suggested that a locality (adjacency) condition on structural case assignment explains the systematic absence of ditransitive ECM verbs. I argue here that Icelandic lacks this adjacency condition: structural Case in Icelandic is available to the second argument of a ditransitive in Icelandic. The Case-theoretic account would predict that Icelandic should therefore contrast with English and allow ditransitive ECM constructions. It does not. The absence of ditransitive ECM predicates is thus part of a broader generalization than Case Theory can explain.

1 The make-believe argument

Chomsky (1980: 29), in the paper introducing GB Case Theory, notes the absence of ditransitive ECM verbs, and suggests that Case provides a straightforward account of this lexical gap. While there are double object constructions like (1) and ECM (equivalently Raising-to-Object) predicates like (2), the two properties do not cooccur with a single predicate. There are no ditransitive ECM predicates, neither of the double object type (3a) nor with a matrix PP internal argument (3c).

- (1) Leo gave Julia a book.
- (2) Leo believes Julia_j [t_j to have won].
- (3) a. * Leo convinced Sarah Julia_i [t_i to have won].
 - b. * Leo persuaded Sarah Julia_i [t_i to win].
 - c. * Leo appealed to Sarah Julia_j [t_j to be nominated].



Jonathan David Bobaljik. 2017. On a "make-believe" argument for Case Theory. In Michelle Sheehan & Laura R. Bailey (eds.), Order and structure in syntax II: Subjecthood and argument structure, 277–283. Berlin: Language Science Press. DOI:10.5281/zenodo.1116773

Jonathan David Bobaljik

Verbs that select an infinitive and two other arguments are systematically control predicates, or allow a *for* complement:

- (4) a. Leo convinced $Sarah_i$ [PRO_i to win].
 - b. Leo appealed to Sarah_i [PRO_i to (let him) win].
 - c. Leo appealed to Sarah [for Julia to be nominated].

This is a curious gap, inasmuch as semantically, verbs like *convince* and *persuade* seem to mean roughly a kind of causative of *believe* (thus 5 implies 6). There is no obvious reason why a verb meaning *make-believe* should not be able to have the range of arguments available to *believe*, plus a causer.

- (5) Sarah convinced/persuaded Leo [that Julia won].
- (6) Leo believes [that Julia won].

Chomsky argues that Case Theory accounts straightforwardly for this gap: structural case assignment is only possible to the adjacent complement of the verb, and the higher internal argument, whether an NP or PP, will invariably disrupt the adjacency between the verb and the infinitival subject required for structural case assignment.¹

The recent ascendance of Dependent Case Theory [DCT] (Marantz 1991; Baker 2015) as an alternative to (L)GB Case Theory invites a reconsideration of established arguments for the latter. Under the strongest version of DCT, the syntactic distribution of NPs is not regulated by case (or Case), rather, NPs are assigned a particular morphological case as a function of the grammatical structure in which they are found. As such, the explanation of the contrast in (2–3) originally sketched by Chomsky is unavailable under DCT, and thus constitutes a prima facie argument against a strong DCT. In this squib, I argue that Chomsky's argument that Case is implicated does not withstand scrutiny. Specifically, the contrast in (2–3) is replicated in Icelandic, although it can be shown that there is no intervention (or adjacency) effect on structural accusative case assignment in that language. This yields two conclusions: the absence of ditransitive ECM constructions is not a language-particular quirk of English, but at the same time, GB/MP-style Case Theory is not a viable explanation of the gap. After presenting

¹This argument is revived in Boeckx & Hornstein (2005) with more modern technology: in place of adjacency, Boeckx & Hornstein (2005) follow Bošković (2002) in claiming that structural case requires movement, and posit a structure under which movement across the higher NP in examples parallel to (3a) violates relativized minimality (they do not mention the PP cases). Boeckx & Hornstein (2005) claim that the case on the theme in (1) is inherent and thus not subject to minimality/adjacency. This is implausible in Icelandic, see note 2.

this argument, I will speculate that the absence of ditransitive ECM predicates is plausibly a special case of the oft-cited generalization that a single underived predicate may take no more than three obligatory arguments (see e.g., Pesetsky 1995).

2 Icelandic

Icelandic has played a significant role in discussions of case across multiple generative frameworks, especially since the seminal article by Zaenen et al. (1985). A central finding is that Icelandic (descriptively) lacks the adjacency or intervention condition on structural (accusative) case which plays the key role in Chomsky's account of why (3a) is excluded. The main observation comes from double-object constructions in Icelandic of the *give* type, illustrated in (7):

- (7) a. Jón gaf Ólafi bókina. Jon.NOM gave Olaf.DAT book.the.ACC
 'Jon gave Olaf the book.' (Holmberg & Platzack 1995: 187)
 b. Ólafi var gefin bókin.
 - Olaf.DAT was given book.' (Falk 1990)
 - c. Pað hafa einhverjum strák verið gefnar gjafir.
 EXPL have some.DAT boy.DAT been given.PL gifts.NOM.
 'Some boy has been given presents.' (Holmberg & Nikanne 2002: 99)

Of the two internal arguments of ditransitive construction in Icelandic, the higher one (the dative NP in 7a) becomes the subject in the passive, but the lower one in the configuration in (7a) undergoes the case alternation which is diagnostic of structural case: accusative in the active, but nominative in the passive.²

- (i) Han telur mig vanta peninga. he believes me.ACC lack money 'He believes me to lack money.'
- (ii) Mig er talið vanta peninga. me.ACC is believed lack money
 'I am believed to lack money.' (Andrews 1982)

²One might question whether the case alternation in passive is sufficient evidence that the accusative on the theme is structural case. The literature at least since Andrews (1982) has noted that Icelandic has both inherent and structural accusative, and these are distinguished precisely by this diagnostic. For example, inherent accusative (as on the subject of *vanta* 'lack'), unlike structural accusative, is preserved in the passive of an ECM complement, as shown in the following:

These examples have received extensive scrutiny in the literature since Zaenen et al. (1985), and it is very firmly established that the dative is the subject in (7b) (for example, it constitutes the associate in the transitive expletive construction 7c) and the nominative is an object.³ Whatever the analysis, these examples establish the baseline: in Icelandic, structural case is available to the lower of two internal arguments in a ditransitive construction. If accusative is assigned by (a functional projection associated with) the verb, then (7a) and related examples show that this assignment is not subject to an adjacency or intervention condition.⁴

Like English, Icelandic also has ECM verbs, like 'believe':

(8) Ég tel Harald hafa unnið.
 I believe Harald.Acc have.win won
 'I believe Harald to have won.'

And like English, the 'convince' type verbs, taking an upstairs internal argument, may take a finite or an infinitive (object control) complement, but disallow ECM:⁵

(9)	a.	Ég sannfærði þá um [að Harald-ur hefði unnið]. I convinced them P that Harald-NOM had won
		'I convinced them that Harald had won.'
	b.	Ég sannfærði Harald um [að PRO vinna]. I convinced Harald.Acc P to win.INF
		'I convinced Harald to win.'
	c.	* Ég sannfærði þá um [Harald hafa unnið]. I convinced them P Harald.Acc have.INF won
		'I convinced them Harald to have won.'

³As Holmberg (1994) and Holmberg & Platzack (1995) discuss, an 'inverted' order is also possible: the nominative theme may raise to subject position with this class of verbs, but this stems from an 'inverted' order in the active, in which the theme precedes and c-commands the goal.

⁴Holmberg & Nikanne (2002) argue that nominative case is subject to an intervention effect, accounting for the absence of impersonal passives of double-object constructions. In theory, one could maintain an intervention-like locality condition on all structural case in Icelandic, but then posit an additional case-assigning head below the indirect object in examples like (7a); see Svenonius (2006). The source of structural accusative does not bear on the argument made in this squib; the important fact is that it is available to the lower NP in a ditransitive construction. As noted above, the accusative in (7a) patterns with structural, rather than inherent, case in Icelandic, where the distinction is sharper than in English: inherent case in Icelandic, unlike structural case, fails to alternate in the periphrastic passive, and other contexts.

⁵The verb meaning 'convince' in this context happens to be a particle verb, but this is not relevant to the generalization as just stated – there are evidently no verbs with the frame in (9c) with or without a particle.

Note finally, that Icelandic has predicates like *virðast* 'seem' which (i) select an infinitive complement, (ii) treat the subject of that complement (*María* in 10) as a matrix object in an ECM-like fashion, and (iii) select a second internal NP argument, distinct from the embedded subject (*Haraldi* in 10). Crucially, though, all such verbs lack an external argument of the matrix predicate, and thus have a dative-nominative case array: the embedded subject behaves in the matrix clause as a nominative object (and not as a matrix subject).

(10) Harald-i virðist María vera þreytt. Harald-DAT seems Maria.NOM be.INF tired 'Maria seems to Harald to be tired.'

Icelandic has more options than can be seen in English, but in key respects, Icelandic is like English, lacking ditransitive ECM predicates. However, since Icelandic allows structural accusative to be assigned 'across' an intervening NP or PP, the account given by Chomsky (and Boeckx & Hornstein 2005) does not extend to Icelandic.

3 Conclusion

Chomsky's intriguing observation that there are no ditransitive ECM verbs holds of Icelandic as well, a language with an English-like ECM construction. This is in and of itself interesting, since it affirms Chomsky's suggestion that this gap in the lexicon is systematic, and not accidental. At the same time, Icelandic undermines the proposed analysis of this gap in terms of Case Theory (and thus the corresponding argument for Case Theory). Since Icelandic evidently lacks the adjacency requirement that English (supposedly) has, that requirement cannot be the source of the absence of ditransitive ECM verbs across both languages.

What direction might an alternative account take? I suggest that it is not implausible to see the absence of ditransitive ECM verbs as part of the broader generalization that there is an apparent upper bound on the number of arguments a non-derived predicate may take as part of its argument structure.⁶ Although there is some dissent, general opinion seems to place that limit at three.⁷ A ditransitive verb like *give* or *put* takes the maximum, with three arguments. So too do object control predicates *convince* and *appeal* likewise take three arguments

⁶Derived predicates, such as causatives, applicative, and other types of complex predicates, may take more.

⁷Lisa Travis points me to Carter (1976) for the suggestion that the limit is four, on the basis of verbs like *trade: John traded his cobra to Mary for something*.

apiece: an external NP, an internal NP or PP argument, and the infinitival complement. If the non-thematic position associated with raising predicates counts as one argument towards the maximum, then Chomsky's generalization is subsumed under this larger one: one argument of the raising verb is the infinitive complement (LFG's xCOMP), and a second the athematic position that is the landing site of raising (whether to subject or object). This leaves only one 'free' slot, which may be an external argument (as in *believe*) or an internal one, as in *seem* (with a PP experiencer). But crucially not both. I leave open here the explanation for the apparent limit to three arguments per predicate, noting, though, that as NPs, PPs, CPs and infinitival clauses (whether those are CP or IP) all contribute towards the maximum, but only a subset of these bear Case, any attempt to account for these effects in terms of Case will necessarily cover only a subset of the generalization.

Acknowledgments

This squib arose out of a discussion with Susi Wurmbrand, Željko Bošković, and Mark Baker. I thank Gísli Rúnar Harðarson, Höskuldur Þráinsson, and Jim Wood, for discussion of Icelandic (and for the examples). For other feedback, I thank two anonymous reviewers, as well as Lisa Travis, Richard Larson and other audience members at McGill, EGG Brno, UConn, ReCoS Villa Salmi, and Stony Brook University.

References

- Andrews, Avery. 1982. The representation of case in Modern Icelandic. In Joan Bresnan (ed.), *The mental representation of grammatical relations*, 424–503. Cambridge, Mass: MIT Press.
- Baker, Mark. 2015. Case: Its principles and parameters. Cambridge: Cambridge University Press.
- Boeckx, Cedric & Norbert Hornstein. 2005. A gap in the ECM paradigm. *Linguistic Inquiry* 36. 437–441.
- Bošković, Željko. 2002. A-Movement and the EPP. Syntax 5. 167–218.
- Carter, Richard. 1976. Some constraints on possible words. Semantikos 1. 27-66.
- Chomsky, Noam. 1980. On binding. Linguistic Inquiry 11. 1-46.
- Falk, Cecilia. 1990. On double object constructions. *Working Papers in Scandinavian Syntax* 46. 53–100.

- Holmberg, Anders. 1994. The pros and cons of agreement in Scandinavian impersonals. In Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi & Raffaella Zanuttini (eds.), *Paths toward Universal Grammar: Studies in honor of Richard S. Kayne*, 217–336. Washington: Georgetown University Press.
- Holmberg, Anders & Urpo Nikanne. 2002. Expletives, subjects, and topics in Finnish. In Peter Svenonius (ed.), *Subjects, expletives, and the EPP*, 71–105. Oxford: Oxford University Press.
- Holmberg, Anders & Christer Platzack. 1995. *The role of inflection in the syntax of the Scandinavian languages*. Oxford: Oxford University Press.
- Marantz, Alec. 1991. Case and licensing. In German Westphal and Benjamin Ao and Hee-Rahk Chae (ed.), *Proceedings of ESCOL 91*, 234–253. Cornell Linguistics Club.
- Pesetsky, David. 1995. Zero syntax: Experiencers and cascades. Cambridge, MA: The MIT Press.
- Svenonius, Peter. 2006. Case alternations and the Icelandic passive and middle. In Satu Manninen, Diane Nelson, Katrin Hiietam, Elsi Kaiser & Virve Vihman (eds.), *Passives and impersonals in European languages*. Amsterdam: John Benjamins.
- Zaenen, Annie, Joan Maling & Höskuldur Thráinsson. 1985. Case and grammatical functions: The Icelandic passive. *Natural Language and Linguistic Theory* 3. 441–483.