

The Innovative *hvor* ‘each’ Reciprocals and Distributives in Icelandic

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ABSTRACT Standard Icelandic has the reciprocal *hvor annar* ‘each other’ and the distributives *hvor sinn* ‘each their’ and *sinn hvor* ‘their each’ (the latter two being largely synonymous). The two parts of these expressions are case distinct and also positionally split by a preposition, when there is one, as in, for example, *hvor um annan*, lit. “each.NOM about other.ACC” = ‘about each other’. The positional properties and the case marking patterns of these standard Icelandic expressions are cross-linguistically rare. In roughly the last two centuries, though, everyday Icelandic has developed innovative and less exotic reciprocals and distributives, where the two parts of the expressions are adjacent (as in most related languages) and commonly case congruent, as in *um hvorn annan* ‘about each.ACC other.ACC’, or, in the case of the distributives, *um sitthvorn*, lit. “about their-each.ACC”. In this paper, we report on a corpus study of these innovative reciprocals and distributives and discuss how they relate to the traditional standard expressions. We propose that the traditional expressions are derived by what we refer to as *e-raising*, whereby the first of the two items involved, most commonly *hvor*, is raised from its base position to the base position of its antecedent prior to case marking, thereby getting the same case as its antecedent. The major difference between the old and the new expressions is that the latter lack *e-raising*.

Keywords: Icelandic, reciprocals, distributives, case, case agreement, *e-raising*

1. Introduction

Standard Icelandic has a remarkable reciprocal construction, with the pronouns *hvor* ‘each’ and *annar* ‘other’. The semantics of this *hvor annar* construction is largely parallel to the semantics of *each other* in English and similar constructions in many other languages. Its morphosyntax, however, is different from that of *each other* constructions in most related languages. In a recent study, H. Sigurðsson, Wood, and E. Sigurðsson (2021), henceforth **SWS**, we refer to *hvor* and *annar* as “each associates”, *e-associates* for short. *Hvor* is the *higher* *e-associate*, and *annar* is the *lower* *e-associate*. Intriguingly, they are both case split and positionally split in examples like (1).¹

(1) THE TRADITIONAL RECIPROCAL *HVOR ANNAR* CONSTRUCTION:

Peir höfðu talað hvor um annan.
they.NOM.M.PL had talked each.NOM.M.SG about other.ACC.M.SG
‘They had talked about each other.’

¹ Many of our examples, for instance this one, are from SWS. Icelandic makes masculine-feminine-neuter distinctions in both singular and plural pronouns, but, for simplicity, we only use masculine examples (the masculine forms are more common than the neuter and feminine ones).

Hvor and *annar* are positionally split by the preposition *um* ‘about’, and they are also case split: *hver* agrees in case and gender (but not in number) with its antecedent, here the NOM subject *þeir* ‘they’, while *annar* is assigned ACC by the preposition. When the clause contains no preposition, the e-associates are adjacent, but they are nevertheless case split, as shown in (2), where *hver* again agrees in case with the NOM subject, while *annar* gets ACC from the verb *séð* ‘seen’.

(2) THE TRADITIONAL RECIPROCAL *HVOR ANNAR* CONSTRUCTION:

Þeir hafa séð hvor annan.
 they.NOM.M.PL have seen each.NOM.M.SG other.ACC.M.SG
 ‘They have seen each other.’

In SWS we developed an analysis where *hver* raises, by what we refer to as *e-raising*, to the base position of its antecedent, and where the main verb subsequently raises to Voice, across *hver*. This is sketched in (3) for the example in (1).

- (3) [TP *they_i* had [VoiceP *talked_j* [[_{VP} *they_i* *each_{i+k}* [v *talked_j* [_{PP} *about* [_{DP} [*each_k* [_{NP} *other_k* ...]]]]]]]
þeir höfðu talað hvor um annan
 NOM NOM (no case) ACC
 e-raising

Thus, in addition to finite verb raising, we have three movements here. The main verb *talað* ‘talked’ raises out of vP to Voice, *hver* raises by e-raising to its subject antecedent in Spec,vP, and the antecedent *þeir* raises by regular subject movement to Spec,TP, stranding *hver* in Spec,vP.

E-raising is only detectable in structures with PP objects, as in (1)/(3), where it raises *hver* across the preposition. In constructions with direct objects, as in (2), it is positionally non-detectable, but we assume that it takes place there as well. If so, e-raising in both (2) and (1)/(3) moves *hver* out of the case domain of the main verb vs. the preposition prior to case marking; hence, it gets NOM, as its subject antecedent, and not ACC, as the remnant object *annar*.

This analysis resolves an otherwise recalcitrant problem, referred to as the *case puzzle* in SWS: Without e-raising we would be forced to assume, first, that transitive verbs may opt to not assign their case to their right-adjacent nominal, *hver*, nevertheless assigning case to their objects, across *hver*, and, second, that a nominal element, *hver*, can be positioned within the case-marking domain of a transitive verb and nonetheless be able to case agree with an antecedent that is outside of that domain.

E-raising applies to *hver*, regardless of the case of its antecedent, resulting in case agreement of *hver* and the antecedent. The antecedent is most commonly a nominative subject, but non-nominative antecedents are also possible, as illustrated in (4) for an accusative object antecedent, and in (5) for a dative (“quirky”) subject antecedent.

- (4) *Ég kynnti þá hvorn fyrir öðrum.*
 I introduced them.ACC.M.PL each.ACC.M.SG for other.DAT.M.SG
 ‘I introduced them to each other.’

- (5) *Þeim hefur alltaf líkað hvorum_i við _____i annan.*
 them.DAT.PL has always liked each.DAT.M.SG with other.ACC.M.SG
 ‘They have always liked each other.’

E-raising is also found to some extent in varieties of Faroese (see Thráinsson et al. 2004: 129–130), but it has disappeared from Mainland Scandinavian. Since the 19th century, however, everyday Icelandic (in contrast to standard, formal Icelandic) has developed innovative reciprocal constructions which lack e-raising. A largely parallel development is also seen for *distributives*, involving the e-associates *hver* and the (otherwise) reflexive possessive pronoun *sinn* ‘his/her/its/their’: *hver sinn* and *sinn hver*. In traditional Icelandic, the higher e-associate in the distributives, whether *hver* or *sinn*, undergoes e-raising, but the e-raising is disappearing in the everyday language, where *hver sinn* and *sinn hver* are being replaced by the composite *sitthver* (or, much more rarely, by *sinnhver* or *sínhver*).² The innovative reciprocal is first seen in written language corpora (Tímarit.is) in the 1850s, as reported by Guðmundsdóttir (2016: 25).³ The new distributive, *sitthver*, and so on, is a more recent innovation; the oldest example we find in corpora is from 1914, and the change does not gain momentum until in the 1940s. The corpora are Tímarit.is (<https://timarit.is>) and the Icelandic Gigaword Corpus (<https://malheildir.arnastofnun.is>).

In this paper, we describe these innovative reciprocals and distributives and analyze how they relate to the traditional expressions. We describe and discuss the innovative reciprocals in section 2, the innovative distributives in section 3, concluding in section 4.

2. The Innovative Reciprocals

There are two innovative reciprocal constructions, both of which lack e-raising (see Þráinsson 2005: 88, E. Sigurðsson 2008, Guðmundsdóttir 2016). We refer to these varieties as the *innovative case-congruent reciprocal* vs. the *innovative hybrid reciprocal* (or simply as the congruent vs. the hybrid reciprocal). Two examples of the innovative congruent reciprocal are given in (6).

- (6) THE INNOVATIVE CASE-CONGRUENT RECIPROCAL CONSTRUCTION:
- a. *Þeir hafa séð hvorn annan.*
 they.NOM.M.PL have seen each.ACC.M.SG other.ACC.M.SG
 ‘They have seen each other.’
 - b. *Þeir höfðu talað um hvorn annan.*
 they.NOM.M.PL had talked about each.ACC.M.SG other.ACC.M.SG
 ‘They had talked about each other.’

² *Hver sinn* and *sinn hver* are the NOM.MASC.SG forms. The NOM.FEM.SG forms are *hver sín* and *sín hver*, and the NOM.NEUT.SG forms are *hvort sitt* and *sitt hvort*. In *sitthver*, *sinnhver*, and *sínhver*, the first part, *sitt-*, *sinn-*, and *sín-*, do not inflect for case, but they are homophonous with NOM.NEUT/MASC/FEM.SG freestanding *sitt/sinn/sín*. See further section 3.

³ Some of the earliest texts in Tímarit.is (before 1850) are much less readable than later texts there, but this does not seem to markedly affect the *hver annar* results.

Here, *hvor* and *annar* are both accusative, *hvorn annan*; in the same way, with verbs and prepositions that take a dative or a genitive complement, they are both either dative, *hvorum öðrum* (in the masculine singular), or genitive, *hvors annars*. Hence the term case congruent (or simply congruent). Notice that this case-congruent variety escapes the case puzzle: *hvor* simply gets the same case as *annar*, by regular DP-internal case concord.

As seen in (6b), there is no e-raising in this case-congruent variety. E-raising has also disappeared in the innovative hybrid reciprocal, as exemplified in (7).

(7) THE HYBRID RECIPROCAL CONSTRUCTION:

Peir höfðu talað um hvor annan.
 they.NOM.M.PL had talked about each.NOM.M.SG other.ACC.M.SG
 ‘They had talked about each other.’

In contrast to the case-congruent construction, this variety seemingly shares case properties with the traditional one, with *hvor* showing up in the nominative, like its antecedent. Thus, the case puzzle seems to be unresolved here: *hvor* does not raise out of the case domain of the preposition, nevertheless showing up in the nominative. We will however argue that nominative *hvor* in the hybrid construction is assigned by default and thus not due to case agreement.

The case-congruent variety has been widely commented on in normative writings. The hybrid variety is discussed in E. Sigurðsson 2008, but it has not been nearly as widely noticed; for the most part, it does not seem to have been taken seriously as an independent phenomenon. There is a strong normative pressure in favor of using the traditional reciprocal instead of the innovative ones; in normative writings on the e-associate constructions the general rule is usually said to be that the e-associates “do not / should not” co-inflect.⁴ It thus seems plausible to assume that the hybrid reciprocal has arisen as a result of this normative pressure: speakers fail to apply e-raising, but they comply with the “instructions” by having the e-associates case split. However, even though normative pressure presumably enhances the hybrid reciprocal at the expense of the congruent one, it cannot be the only factor affecting the distribution of the two varieties. First, as carefully demonstrated by Guðmundsdóttir (2016), normative writings on the innovative reciprocal (congruent or hybrid) are non-existent prior to 1980. Second, the hybrid reciprocal commonly emerged *earlier* in corpora than the congruent one (a fact that has not been noticed previously). We have checked this in Tímarit.is (<https://timarit.is>, 2019-09-26) for most simple prepositions in the language, 39 in number, and it turns out that for the overwhelming majority of them the hybrid variety occurs earlier than the congruent one, sometimes many decades earlier.⁵ We show this below for only the masculine singular forms of the reciprocal.

We demonstrate our masculine singular results for the 12 most common constructions in tables 1–3 where the number of examples (of hybrids and “congruents” together) is 100 or more; the first column shows the year when the construction is first seen on Tímarit.is, the

⁴ As reported by E. Sigurðsson (2008) and Guðmundsdóttir (2016). See also, for example, <https://malfar.arnastofnun.is/grein/72165>, <https://malgagnid.wordpress.com/lexiur/hver-sinn-hvor-annan-og-allt-thad/>, and <https://www.visindavefur.is/svar.php?id=52166> (2019-09-05).

⁵ We only searched for examples with PP objects, as the hybrid reciprocal cannot be distinguished from the traditional reciprocal in examples with plain direct objects.

second column shows the overall number of examples found in the corpus between 1873 and 2019, and the third column (00–09) shows the number of examples found in the period 2000–2009. Only the most central translations are given (and note that some prepositions, including *á*, can either take accusative or dative, depending on meaning).

Table 1: Accusative-taking preposition (Tímarit.is, 2019-09-26)

	<i>Hybrid</i>			<i>Congruent</i>		
	First	Total	00–09	First	Total	00–09
á ‘on(to), in(to)’	1949	130	39	1916	245	57

Table 2: Genitive-taking prepositions (Tímarit.is, 2019-09-26)

	<i>Hybrid</i>			<i>Congruent</i>		
	First	Total	00–09	First	Total	00–09
til ‘to’	1890	32	9	1915	466	39
án ‘without’	1918	33	9	1923	174	83

Table 3: Dative-taking prepositions (Tímarit.is, 2019-09-26)

	<i>Hybrid</i>			<i>Congruent</i>		
	First	Total	00–09	First	Total	00–09
andspænis ‘opposite’	1873	409	34	1946	10	1
við ‘to, at, against’	1880	124	17	1983	5	0
að ‘towards’	1888	150	21	1946	12	2
móti ‘against’	1893	186	54	1974	17	7
fyrir ‘for, because of’	1920	180	30	1963	8	2
gegn ‘against’	1921	103	23	1979	13	4
á ‘on, in’	1938	181	58	1946	18	6
af ‘off, from’	1945	150	45	1947	21	2
hjá ‘by, at’	1946	120	38	1986	8	2

Thus, for instance, the first example of hybrid *andspænis hvor öðrum* ‘opposite each.NOM other.DAT’ occurs in the corpus in 1873, while the first example of congruent *andspænis hvorum öðrum* ‘opposite each.DAT other.DAT’ occurs in 1946, more than 70 years later.

There are some pitfalls here, which we have tried to avoid. Thus, *við* ‘with’ (+ ACC or DAT) and *um* ‘about’ (+ ACC) are common prepositions, but *við* is homophonous with the first person plural nominative pronoun *við*, and *um* is commonly mixed with the first person plural ending *-um* in the corpus, so we do not include these prepositions. These problems do not arise in the tagged Icelandic Gigaword Corpus in <https://malheildir.arnastofnun.is>. The drawback of the Icelandic Gigaword Corpus is that it is smaller than Tímarit.is and that one must check the dates of the examples manually (which we have not done). However, we searched the Icelandic Gigaword Corpus specifically (2020-06-27; the 2018 version) for the total number of masculine

singular innovative reciprocals with the ACC-taking prepositions *á*, *um* and *við*. The results are given in table 4.

Table 4: Accusative-taking prepositions (the Icelandic Gigaword Corpus, 2020-06-27):

	<i>Hybrid</i>	<i>Congruent</i>
<i>á</i> ‘on(to), in(to)’	65	445
<i>um</i> ‘about’	35	78
<i>við</i> ‘with’	59	323

Peculiarly, the case marking of the prepositions seems to matter. With prepositions that assign GEN or ACC, the congruent variety is much more common in our masculine data than the hybrid variety, whereas the opposite is true for prepositions that assign DAT. Parallel searches yielded similar results for the singular neuter forms, but searches for the singular feminine forms (which do not emerge in the innovative reciprocals in corpora until in the 1930s–1950s) revealed that the hybrid variety is much more common than the congruent one for all the prepositions searched for. That is, the case marking of the prepositions matters for the masculine and the neuter but not for the feminine. We do not have a theory of why this is so.

These results strongly indicate that the development has been *traditional* > *hybrid* > *congruent*, which means that the hybrid must be taken seriously as an independent construction. Moreover, these facts suggest that the first thing to happen was that the traditional variety’s e-raising of *hver* ‘each’ out of the DP was lost, with the DP-internal case concord commonly spreading to *hver* only later. The most obvious change that is taking place is the loss of e-raising (in line with the past historical development in the Mainland Scandinavian languages), but there is also another development lurking here: the spreading of default NOM; see further at the end of this section.

Generally, but with some exceptions, the traditional case-split reciprocal is still the most common variety in the corpora. In tables 5–7 below we compare the number of (masculine) hits for each of the three varieties in Tímarit.is for the period 2000–2009, for the same 12 prepositions as in tables 1–3 above.

Table 5: Accusative-taking preposition (Tímarit.is 2000–2009, 2019-09-26):

	<i>Hybrid</i>	<i>Congruent</i>	<i>Traditional</i>
<i>á</i> ‘on(to), in(to)’	39	57	354

Table 6: Genitive-taking prepositions (Tímarit.is 2000–2009, 2019-09-26):

	<i>Hybrid</i>	<i>Congruent</i>	<i>Traditional</i>
<i>tíl</i> ‘to’	9	39	132
<i>án</i> ‘without’	9	83	4

Table 7: Dative-taking prepositions (Tímarit.is 2000–2009, 2019-09-26):

	<i>Hybrid</i>	<i>Congruent</i>	<i>Traditional</i>
andspænis ‘opposite’	34	1	5
við ‘to, at, against’	17	0	7
að ‘towards’	21	2	80
móti ‘against’	54	7	1
fyrir ‘for, because of’	30	2	96
gegn ‘against’	23	4	29
á ‘on, in’	58	6	109
af ‘off, from’	45	2	300
hjá ‘by, at’	38	2	84

For eight of the 12 prepositions, the traditional variety is the most common one, sometimes by far, for three of them, the hybrid variety is the most common one, while the congruent variety is the most common one for only one of the prepositions, genitive-taking *án* ‘without’.

These results are quite scattered; there is a lot of variation in the data, variation that has not been highlighted before, and some of which is surprising. There is also a remarkable split between the written and the spoken language. While the traditional variety seems to be on its way out of the spoken language (see section 3), it is commonly the most robust variety in the written language.

In the congruent reciprocal, *hvor* simply gets the same object case as *annar*, so its case marking is unproblematic. In the hybrid reciprocal, though, *hvor* is case distinct from *annar*, despite not undergoing e-raising. We saw an example of this in (7). Another example is given in (8).

- (8) *Þeir spiluðu gegn hvor öðrum.*
 they.NOM.M played against each.NOM.M other.DAT.M
 ‘They played against each other.’

In addition, we find examples with adjacent *hvor* and *annar* within nominal genitives, both congruent and hybrid. We illustrate this in (9).

- (9) a. *Þeir hlustuðu á hvor/hvors annars ræður.*
 they.NOM.M listened on each.NOM.M/GEN.M other.GEN.M speeches.F
 ‘They listened to each other’s speech(es).’
 b. *Þeir hlustuðu á ræður hvor/hvors annars.*
 they.NOM.M listened on speeches.F each.NOM.M/GEN.M other.GEN.M
 ‘They listened to each other’s speech(es).’

Examples of this sort are not numerous. Nevertheless, on Tímarit.is (2019-10-30), we found 10 examples of hybrid *á hvor annars* (NOM-GEN) and 52 examples of congruent *á hvors annars* (GEN-GEN) and we also found some examples of *á* NOUN *hvor/hvors annars* (as in (9b)).⁶

Again, the congruent variety is unproblematic, while the hybrid variety shows that some speakers accept case split (where *hvor* seemingly agrees in case with its antecedent, and not with *annar*), even when no e-raising takes place. Notice that although nominative is arguably “a non-case” in syntax (H. Sigurðsson 2012), it is “a case” in PF, and, as seen in (8) and (9), nominative *hvor* does PF-agree in gender with its antecedent.

Nominative is the default case in Icelandic, so the NOM on *hvor* in examples like (8) and (9) might be a last resort default case, and not really case agreeing with its antecedent. Such nominatives are seen in Exceptional Case Marking, ECM, where the antecedent of the NOM *hvor* is ACC (and has been raised into the matrix clause, cf. Thráinsson 1979: 391 on Icelandic). This is illustrated in (10) (*þá*, *hvor*, and *annar* are all masculine).

- (10) a. *Ég taldi þá [TP ____i hafa hjálpað hvor/*hvorn öðrum].*
 I believed them.ACC have helped each.NOM/*ACC other.DAT
 ‘I believed them to have helped each other.’
 b. *Ég taldi þá [TP ____i lesa kafla hvor/*hvorn annars].*
 I believed them.ACC read chapter each.NOM/*ACC other.GEN
 ‘I believed them to read each other’s chapters.’

As *hvor* here has no NOM antecedent, its NOM cannot be due to case agreement, and must instead be a default NOM, as in (8) and (9). In the case-congruent variety, on the other hand, we get *hjálpað hvorum öðrum* (DAT-DAT) and *kafla hvors annars* (GEN-GEN), respectively.

The first step in the development of the innovative reciprocals seems to have been the “plain” loss of e-raising, as sketched in (11).

- (11) a. They.NOM talked each.NOM about other.ACC
 b. > They.NOM talked about each.NOM other.ACC

In SWS we argue that e-raising applies in the standard variety for the purpose of successful case agreement of the e-raiser (here *hvor* ‘each’) with its antecedent. If e-raising is no longer required or even available, speakers plausibly have two options to select between: They either apply DP-internal case concord, yielding the case-congruent reciprocal, or they replace case agreeing NOM by default NOM, yielding the hybrid reciprocal.

With the exception of the ECM examples in (10), however, the hybrid examples we have looked at so far have nominative antecedents, so one might wonder whether the NOM of *hvor* in examples such as (11b) is an agreeing NOM after all, rather than default NOM. If so, case agreement of *hvor* would not necessarily be contingent on e-raising, contra SWS. However, as

⁶ In the traditional variety, *hvor* e-raises in front of the preposition: *hvor á annars ræður* “each on other’s speech(es)” (the basic order is presumably [*á hvor annars ræður*], see SWS). We found 153 examples of *hvor á annars* in Tímarit.is (2020-01-27). Even though genitive possessors cannot normally raise out of DPs in Icelandic we also find 19 examples of *hvors á annars* ‘each.GEN on other’s.GEN’ in Tímarit.is (2021-06-05).

seen in (10), there are some instances of NOM *hvor* without an accessible nominative antecedent in ECM infinitives, and there are also such examples in finite clauses. We searched the Icelandic Gigaword Corpus in <https://malheildir.arnastofnun.is> (2021-05-27) for such examples with a dative antecedent. Dative antecedents of the reciprocals are rare in corpora, but we nevertheless found seven such examples. Three of them were of the “expected” type DAT – preposition NOM – ACC, with absent e-raising; one of them is given in (12).

- (12) *að undir niðri líki þeim við hvor annan*
 that under neath like them.DAT with each.NOM other.ACC
 ‘that deep down they like each other.’

The other four were of the “unexpected” type DAT – NOM preposition – ACC, *with* e-raising; one of them is given in (13).

- (13) *ef þeim líkaði betur hvor við annan*
 if them.DAT liked better each.NOM with other.ACC
 ‘if they liked each other better’

All seven examples are from the 21st century (2001–2017), not surprisingly, as most of the texts in the Icelandic Gigaword corpus are from the 21st century.

In Tímarit.is we also find 11 examples (from 1910–1993) of *þeirra hvor við annan/aðra* ‘their.GEN each.NOM with other.ACC.MASC/ACC.FEM’, as in (14).

- (14) *og samband þeirra hvor við annan*
 and relation their.GEN each.NOM with other.ACC
 ‘and their relation with each other’

Like the ECM examples in (10), the examples in (12)–(14) show that some speakers accept default NOM in the absence of a nominative antecedent. The simplest assumption is that all instances of NOM *hvor* in the hybrid reciprocal are NOM by default rather than by case agreement, even in the presence of a nominative antecedent. The examples of the types in (13) and (14) are puzzling though, as they combine e-raising and default NOM. We hypothesize that they come into being as a result of the normative pressure mentioned before, where speakers are urged “not to co-inflect” *hvor* and *annar*.

Default NOM shows up in a number of other constructions. Compare the examples in (15) and (16).

- (15) *Þeim/*Þeir leiðist ekki mikið.*
 them.DAT/*NOM bores.3SG not much
 ‘They aren’t very bored.’

As has been widely discussed, the verb *leiðast* ‘be bored’ can normally only take a dative subject. However, when a relative clause is added to the structure, many speakers accept NOM *þeir*, as shown by Wood et al. (2017). This is illustrated in (16).

- (16) %*Þeir* [sem þú hittir ___] ___ leiðist ekki mikið.
 they.NOM that you meet ___ACC ___DAT bores.3SG not much
 ‘The ones you meet aren’t very bored.’ (from Wood et al. 2017: 219)

As seen, there is no syntactic source for the NOM on *þeir* in (16). Notice also that pronominal nominative subjects normally trigger full agreement of the finite verb, but the matrix verb in (16) does not agree with the NOM *þeir*, instead showing up in 3SG, as in (15), as it regularly does in the absence of a nominative argument (H. Sigurðsson 1996 and much subsequent literature). We conclude, with Wood et al., that NOM is assigned to *þeir* in (16) by default.

There are further indications that default NOM is currently spreading, often at the expense of traditional case agreement. This is for example seen in control predicates, secondary predicates and nominal adjuncts or appositives, as illustrated in (17) (see, for example, Friðjónsson 1979; H. Sigurðsson 2006: 215).

- (17) a. *Við sögðum henni að vera %síðastri/síðust.*
 we told her.DAT to be last.%DAT/NOM
 ‘We told her to be the last one.’
 b. *Þér verður kalt svona berum/ber.*
 you.DAT will-be cold so naked.DAT/NOM
 ‘You will be cold so naked.’
 c. *Henni leiddist sem presti/prestur.*
 her.DAT bored as priest.DAT/NOM
 ‘She was bored as a priest.’
 d. *Í ljóðinu Frelsinu/Frelsið*
 in poem-the.DAT freedom-the.DAT/NOM
 ‘in the poem the Freedom’

Historical data on this variation is not easy to collect. However, we know that distant dative agreement in infinitives, as in (17a), was more widespread in Old Icelandic (see Friðjónsson 1979, 1989: 47–49) than it is in the modern language, where it is clearly a marginal option, ungrammatical for many speakers (H. Sigurðsson 2008: 415), hence the % sign in front of *síðastri* in (17a). And searching for case-marked adjuncts or appositives of the type in (17d) in the Saga Corpus in <https://malheildir.arnastofnun.is>, we find no examples at all with a default nominative instead of an agreeing dative. The construction was rare in the old language, but we nevertheless find a handful of examples with an agreeing dative: *í eyinni Söxu* ‘in island-the.DAT Saxa.DAT’, and so on. In the modern language, in the Icelandic Gigaword Corpus in <https://malheildir.arnastofnun.is>, we find 92 unequivocal examples of the string *í ljóðinu* + NOM as compared to only 11 unequivocal examples of *í ljóðinu* + DAT.⁷ Guðfinnsson (1938: 17–18) discusses constructions of this sort (for example *í dagblaðinu Vísi/Vísir* ‘in newspaper-the.DAT

⁷ A search for these strings shows 93 instances with NOM and 41 with DAT, but in many instances the NOM and DAT forms are homophonous; we did not count them in. There are also many instances where the cases are wrongly classified, so we went through the list manually and corrected the results accordingly.

Vísir.DAT/NOM') and says that the nominative is “grammatically wrong” but “common nowadays”, which suggests that he considered the nominative to be gaining ground.⁸

It seems clear that default NOM is on the increase, at the expense of case agreement. We hypothesize that the emergence of the innovative hybrid reciprocal is related to this general trend to replace case agreement with default NOM. According to SWS, e-raising is driven by the need of *hvor* to case agree with its antecedent. If this case-agreement requirement with the antecedent is relaxed or disappears, then there is no longer any need for e-raising to apply, which, in turn, should pave the way for either default NOM on *hvor* (regardless of the case of its antecedent), yielding the hybrid reciprocal, or local case concord with *annar*, yielding the case-congruent reciprocal. This seems to be exactly what has happened.

3. The Distributives

In the traditional distributive constructions, the higher e-associate, either *hvor* or *sinn*, e-raises to its antecedent and agrees with it in case and gender — just like *hvor* in the reciprocal. See the examples in (18) and (19).

(18) THE TRADITIONAL DISTRIBUTIVE *HVOR SINN* CONSTRUCTION:

Þeir höfðu komið hvor á sínu hjólinu.
 they.NOM.M.PL had come each.NOM.M.SG on their.DAT.N.SG bike-the.DAT.N.SG
 ‘They had (each) come on separate bikes.’

(19) THE TRADITIONAL DISTRIBUTIVE *SINN HVOR* CONSTRUCTION:

Þeir höfðu komið sinn á hvoru hjólinu.
 they.NOM.M.PL had come their.NOM.M.SG on each.DAT.N.SG bike-the.DAT.N.SG
 ‘They had (each) come on separate bikes.’

The traditional *hvor sinn* and *sinn hvor* constructions are being replaced by a *sitthvor* (or *sinnhvor/sínhvor*) construction in the recent innovative distributive construction. See the examples in (20).

(20) THE INNOVATIVE DISTRIBUTIVE CONSTRUCTION:

- a. *Þeir hafa keypt sitthvora bókina.*
 they.NOM.M.PL have bought their-each.ACC.F.SG book-the.ACC.F.SG
 ‘They have (each) bought separate books.’
- b. *Þeir höfðu komið á sitthvoru hjólinu.*
 they.NOM.M.PL had come on their-each.DAT.N.SG bike-the.DAT.N.SG
 ‘They had (each) come on separate bikes.’

The innovative distributive amalgamates the e-associates. The first part, *sitt-*, is the N.SG form of *sinn*, with no case variation, while the second part, *-hvor*, inflects for case. *Sitthvor*, with

⁸ See also Böðvarsson (1959), Briem (1998: 35–36), Þráinsson (2005: 310), who all point out (as does Guðfinnsson) that coordinated and other complex adjuncts or appositives (as “in the store Flowers and Fruits” and “the play We murderers”) are more prone to resort to the nominative than are simplex adjuncts.

neuter *sitt*-, commonly modifies nouns in all three genders, but as seen in corpora, there is a weak tendency to use the much less frequent masculine *sinnhvor* and feminine *sínhvor* in agreement with masculine vs. feminine objects, respectively. Also in these masculine and feminine forms, there is no case variation in the first part, *sinn*- or *sín*-. However, *sinn*-, *sín*-, and *sitt*- are homophonous with the NOM.SG forms of the freestanding and case-inflecting *sinn*, *sín* and *sitt* in the traditional variety, so they are probably instantiations of default NOM. If so, the spreading of default NOM, instead of case agreement, is involved in both the innovative hybrid reciprocal and the innovative distributives.

As seen, the second *hvor* part of distributive *sitthvor* behaves like *hvor* in the innovative congruent reciprocal, in that it case agrees with its object, and not with its subject antecedent, and, as also seen, the first part, *sinn*-, *sín*-, and *sitt*-, behaves like the first part (*hvor*) in the innovative reciprocals in not undergoing e-raising.

As mentioned in section 1, the innovative reciprocal and distributive constructions are recent. To repeat: The former is first seen in written language corpora (<https://timarit.is/>) in the 1850s, and the new distributive, *sitthvor*, and so on, did not gain momentum until in the 1940s. Both these innovations are gaining ground at the expense of the traditional case-split varieties, as shown for the reciprocal by Guðmundsdóttir (2016), and as also seen for *sitthvor*, and so on, in the corpora. No large-scale informant surveys of these phenomena have yet been carried out. However, two limited informant surveys have been performed: the Guðmundsdóttir 2016 survey on the reciprocal, with 6 examples and 16 informants, and the Þráinsson et al. 2015 survey on distributives, which was also small in terms of the number of examples, but large in terms of the number of informants (over 700). These surveys show the same tendency as the written language corpora: the new reciprocal and distributive constructions are on the increase. Some of the results of Þráinsson et al. on the distributives (2015: 357) are shown in (21). The informants were given four options, a, b, c, and d, and told that they could freely select *one or more* of these options.⁹

- (21) *Þau koma alltaf*
 they.NOM.N.PL come always
- | | | |
|------------|---|-----|
| a. | <i>á sitthvorum bílnum</i>
on their-each.DAT.M.SG car-the.DAT.M.SG | 59% |
| b. | <i>á sínhvorum bílnum</i> | 3% |
| c. | <i>hvort á sínum bílnum</i> | 9% |
| d. | <i>sitt á hvorum bílnum</i> | 7% |
| e. = a&c | <i>á sitthvorum / hvort á sínum bílnum</i> | 11% |
| f. = a&d | <i>á sitthvorum / sitt á hvorum bílnum</i> | 5% |
| g. = a,c&d | <i>á sitthvorum / hvort á sínum / sitt á hvorum bílnum</i> | 2% |
| h. = c&d | <i>hvort á sínum / sitt á hvorum bílnum</i> | 1% |
| i. | other combinations | 2% |
- All: ‘They always come (each) in separate cars.’

⁹ The innovative composite masculine *sinnhvor* (written and pronounced as a single item) was not included, as it is easily mixed with the traditional *sinn hvor* (written and pronounced as two separate items).

Þráinsson et al. (2015) distinguished between four age groups: youngsters (15 years old), young adults (20–25), middle aged (40–45), and old (65–70). The innovative *sitthvorum* in (21a) was the most widely accepted variety for all four age groups, but variably so. As it turned out (Þráinsson et al. 2015: 358), 77% of the youngsters selected *sitthvorum* (in (21a)) as their *only* acceptable option (as compared to 33% of the oldest speakers), while only 3% and 6% of the youngsters selected the traditional *hvort á sínum bílnum* (21c) and *sitt á hvorum bílnum* (21d) as their *only* options, respectively (the corresponding numbers for the oldest speakers were 23% and 13%). There is no question, then, that the innovative reciprocal and distributive constructions are ousting the traditional ones in the spoken language.¹⁰

While the reciprocal comes in two versions, a case-congruent and a hybrid one, both lacking e-raising, but the latter showing case split, there are no innovative distributives with lacking e-raising + case split, as illustrated in (22).

- (22) ??*Þeir* *höfðu talað um hvor sína bókina.*
 they.M.NOM had talked about each.M.NOM their.F.ACC book-the.F.ACC

A case-congruent version of this is even worse, if anything, as shown in (30).

- (23) **Þeir* *höfðu talað um hvora sína bókina.*
 they.M.NOM had talked about each.F.ACC their.F.ACC book-the.F.ACC

The spoken-written language split seen for the reciprocal is also seen for the distributive constructions: innovative *sitthvor* vs. traditional *hver sinn* and *sinn hver*. Recall, that Þráinsson et al. (2015) showed that innovative *á sitthvorum* “on their-each.DAT” was much more widely accepted than traditional *hver á sínum* and *sinn á hvorum*. In the written language, however, the traditional constructions are still prevailing. On Tímarit.is, for the period 2000–2009, we found **54** examples for *á sitthvorum*, **4** for *á sinnhvorum* (with masculine *sinn*-), and **0** for *á sínhvorum* (with feminine *sín*-). These correspond to five fully inflected traditional constructions (in the singular; we disregard potential plurals here). The number of hits we found for these five constructions on Tímarit.is from 2000–2009 are given in (24).

- | | | |
|---------|-------------------------|------------|
| (24) a. | <i>hvort.N á sínum</i> | 93 |
| b. | <i>hver.M/F á sínum</i> | 151 |
| c. | <i>sitt.N á hvorum</i> | 53 |
| d. | <i>sinn.M á hvorum</i> | 20 |
| e. | <i>sín.F á hvorum</i> | 11 |
| | a–e together | 328 |

¹⁰ In the apparent time model (Labov 1966 and much related work) language differences among successive generations are taken to indicate a change in progress, other things being equal (see, e.g., Bailey et al. 1992). We cannot exclude that age-grading is involved, such that some individuals start to change their usage patterns as they get older. If so, however, the effects of this are only marginal. We searched for the accusative *hvorn annan* and the accusative *sitthvorn* in Tímarit.is (2021-06-05), and it turned out that their frequency has been almost constantly growing over time (from the 1850s for *hvorn annan* and from the 1960s for *sitthvorn*).

Thus, the traditional constructions together are almost six times as common as innovative *á sitthvorum/sinnhvorum*.

As suggested by the numbers in (21) and (24), the traditional *sinn hvor* is less common (and more marked) than is the traditional *hvor sinn* in Modern Icelandic. It is therefore rather peculiar that innovative *sitthvor* (and the much rarer *sinnhvor*, *sínhvor*) has apparently developed from *sinn hvor* and not from the less marked *hvor sinn*. The opposite is true in the Mainland Scandinavian languages: Swedish *var sin*, Norwegian *hver sin* (Lødrup et al. 2019), Danish *hver sin* (and not **sin var*, **sin hver*), where the two parts of these expressions are inseparable in regular language use (and could thus be written as single items, as they commonly are in Swedish *varsin*). We do not have an account of this difference.

In parallel with the reciprocals, the requirement that the first part of the distributives (*sitt*-, etc.) case agree with its antecedent has disappeared, which, in turn, is plausibly the reason why e-raising does not take place.

4. Concluding Remarks

This paper describes and discusses ongoing changes in the reciprocal *hvor annar* ‘each other’ and the distributives *hvor sinn* ‘each their’ and *sinn hvor* ‘their each’ in Icelandic, reporting on a corpus study. The diachronic changes in the reciprocal are sketched in (25).

- (25) a. The hybrid reciprocal:
 They.NOM talked each.NOM about other.ACC
 > They.NOM talked about each.NOM other.ACC
- b. The case-congruent reciprocal:
 > They.NOM talked about each.ACC other.ACC
 All: ‘They talked about each other.’

The changes in the distributives are sketched in (26).

- (26) a. They went each.NOM on their.DAT car-the.DAT
 & They went their.NOM on each.DAT car-the.DAT
- b. > They went on their-each.DAT car-the.DAT
 All: ‘They (each) went on separate cars.’

While the traditional variety involves e-raising of *hvor* ‘each’ in the reciprocal and e-raising of either *hvor* or, less commonly, *sinn* ‘their’ in the distributives, e-raising has disappeared in the innovative varieties. The case of *hvor* is nominative in the hybrid reciprocal, but we have argued that its case is nominative by default, rather than a case-agreeing nominative (as opposed to the traditional variety). It seems also likely that the first part *sitt*- in the new distributive *sitthvor* is nominative by default. In the case-congruent reciprocal, in contrast, case agreement with the antecedent has been replaced by regular DP-internal case concord, *hvor* thus getting the same case as the remnant object *annar*.

The underlying factor behind these changes seems to be the discarding of the requirement that the first part of the expressions in question, *hvor annar*, *hvor sinn*, and *sinn hvor*, case

agree with its antecedent. Plausibly, the first stage in the deterioration of case systems of the Icelandic sort is precisely the weakening and loss of case agreement.

An interesting fact we have not addressed here is that the ongoing changes do not, as far as we can tell, affect the semantics of the reciprocal and distributive constructions at all. It thus seems that the positional and case marking properties of these constructions are due to shallow morphological PF adjustment rules.

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