Arrested development: Case attraction as a transitional stage from Old Icelandic demonstrative to relative *sá*

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Old Icelandic relative clauses are frequently preceded by the pronoun *sá*, considered by most grammars to be a demonstrative. Using a large corpus of Old Icelandic prose, I show that when *sá* precedes relative clauses, it is often ambiguous between a cataphoric demonstrative (referring ahead to a relative clause) and relative pronoun (part of the relative clause). Syntactic and prosodic evidence indicates that, at least in some instances, *sá* is unambiguously a relative pronoun, used in tandem with the particle *er*; thus Old Icelandic relative clauses seem to have doubly filled COMP. A notable characteristic of relative *sá* is its pervasive attraction to the case of the matrix antecedent. I argue that case attraction represents an intermediate stage in the reanalysis of *sá* from a demonstrative to a true relative pronoun. Structurally, case-attracting relative pronouns and true relative pronouns occupy different functional positions within a split-CP system. *Sá* achieved the final stage of the development in the seventeenth century, but rapidly declined under competition with the complementizer *sem*, thus leaving the false impression that *sá* never developed beyond the case-attraction stage.

Keywords: Old Icelandic, relative pronoun, demonstrative, case attraction, reanalysis

1. INTRODUCTION. In the languages of western Europe, there are two types of relativizers: relative pronouns (e.g. English *which*, Spanish *quien*, Standard German *der*) and relative complementizers (e.g. English *that*, Spanish *que*, Norwegian *som*).[1] Relative pronouns may show pronoun-like agreement features and may be similar to either demonstrative pronouns or WH-pronouns, while relative complementizers are often homophonous with other complementizers (Harbert 2007:424–26). To account for the fact that English relative clauses employ one of these two types, but never both together, Chomsky and Lasnik (1977) proposed the DOUBLY FILLED COMP FILTER. However, subsequent work has demonstrated that the doubly filled COMP filter is not universal; relative clauses containing both a pronoun and a complementizer can be found in languages such as Bavarian German (1) and Middle English (2).[2]

(1) Der Hund **der wo** gestern d' Katz bissn hod (Bavarian German)
the dog DER RP yesterday the cat bitten has
'The dog that bit the cat yesterday' (Bayer 1984:213)

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[1] These represent just two of the relativization strategies in the languages of the world. For more on the pronoun/particle distinction and a comparison with other relativization types, see de Vries 2001 and references therein.

[2] In the examples throughout this article, antecedents, (potentially) relative pronouns, and relative particles are in boldface. The glosses employ the following abbreviations: ABL: ablative, ACC: accusative, DAT: dative, GEN: genitive, NOM: nominative, PASS: passive, PL: plural, REFL: reflexive, RP: relative particle/complementizer, SG: singular, ST: strong adjective inflection, WK: weak adjective inflection. All examples are from Old Norse (mostly Old Icelandic) unless otherwise indicated.

(2) only the sight of hire **whom that** I serve (Middle English)
'only the sight of her whom I serve' (Chaucer, cited in Lightfoot 1979:321)

Bayer (1984) proposed that *wo* in 1 is in the position of complementizers, while the pronoun *der* is in the landing site of WH-movement. In X-bar-theoretic terms, relative complementizers are heads base-generated in the C position, while relative pronouns are phrases that move to Spec-CP, leaving a trace in the position of the relativized argument (Fanselow & Felix 1987:143).

In Icelandic, the most frequent relativizers, *sem* and *er*, are not relative pronouns but complementizers (Thráinsson 1980, 2007, Jónsson 2017), or traditionally 'relative particles' (RP). In Old Icelandic, this invariant relative particle may be preceded by a pronoun, usually *sá*, which is homophonous with the demonstrative pronoun. This pronoun is considered a demonstrative by some (Nygaard 1905:261–62, Gordon 1988:296, Faarlund 2004:264, Wagener 2017:126ff.), a correlative pronoun by Lindblad (1943), and a relative pronoun by Åfarli (1995).[3] If *sá* is indeed a relative pronoun, Old Icelandic has relative clauses with both C and Spec-CP occupied by overt elements, as in Bavarian.[4]

The primary reason that traditional scholars have viewed *sá* as a demonstrative, even when immediately preceding a relative clause, is that it nearly always bears the case of its antecedent rather than that of the relativized argument (Nygaard 1905:261).[5] In 3, *sá* appears in the masculine accusative singular form *þann*, agreeing with the accusative antecedent *jarl*, rather than appearing in the nominative case of the relativized subject. Likewise, in 4, *sá* appears in the genitive as *þess* in agreement with the antecedent *Herodis*.[6]

(3) Hann setti **jarl** í hverju fylki, **þann er** dœma skyldi lǫg
he set earl.ACC in each district SÁ.ACC RP [e].NOM judge should law
'He placed an earl in each district, who should judge the law.'
(*Heimskringla* 98)

[3] Lindblad's 'correlative' is a pronoun in the antecedent DP that cataphorically refers to a subsequent relative clause. However, such pronouns are syntactically indistinguishable from other demonstratives, and Wagener (2017:79) claims that the demonstrative and correlative functions of *sá* can both be subsumed under 'unique reference'. Because correlatives are a type of demonstrative, in this article they are described as 'cataphoric demonstratives'.

[4] According to Thráinsson (2007:449–50), Modern Icelandic has some double complementizers like *sem að*, but does not allow a pronominal relativizer followed by a complementizer such as **hver sem*. However, these do occur in Old Icelandic, as in 8. See Larsson 2014 for more on this and other types of double complementizers in modern Scandinavian languages.

[5] According to Nygaard (1905:261), pronouns only very rarely bear the case of the relativized argument in the 'popular style'. However, this is common in the 'learned style', which Nygaard (1905:263) argues is an imitation of Latin syntax. Heusler (1950:159) claims that *sá* can have the relativized case only in 'lose angeknüpften Sätze' ('loosely connected clauses'); while it is possible that Heusler means by this nonrestrictive relative clauses, I find virtually no examples of nonattracting *sá* regardless of the restrictive/nonrestrictive distinction. (See Evans 2017 on the effect of this distinction on case attraction in Old High German.) Nonattracting *sá* in my corpus is further discussed in §4.2 below.

[6] Note that 1 is from *Heimskringla* (Aðalbjarnarson 1979, which is not in the Icelandic Parsed Historical Corpus (IcePaHC)), while all other Icelandic examples are from IcePaHC unless otherwise indicated. Punctuation in the examples is as reported in the sources and may correspond to edited versions of these texts rather than the manuscripts. As noted above, antecedents, potential relative pronouns, and relative particles are in bold. When relevant, the position and case of the relativized argument is given in the gloss as [e]. Glosses and translations of Icelandic examples are my own.

(4) synir **Herod-is þess, er** börnum lét fara.
sons H-GEN SÁ.GEN RP [e].NOM children let kill
‘ … sons of (that) Herod, who had the children killed.’
(1150.HOMILIUBOK.REL-SER,.237)

The case facts are the main reason to believe that *sá* is a demonstrative here and not a relative pronoun; Nygaard (1905:256) goes so far as to state that vernacular Old Norse has no relative pronouns, a claim repeated by Heusler (1950:158). Most recently, Wagener (2017) has argued that *sá* cannot be a relative pronoun, not only because of the case facts, but also due to its distribution: it often precedes the antecedent rather than the relative clause, it does not occur with demonstrative *sá* in the same DP, and (in Wagener’s corpus) it is never repeated in stacked relative clauses.[7]

Nevertheless, it is possible to treat such uses of *sá* as relative pronouns, based on two assumptions. First, *sá* can be considered a relative pronoun that displays case attraction (as in Åfarli 1995). In other words, syntactically it can be part of the relative clause, although in terms of morphology its case matches that of the matrix antecedent. This analysis seems plausible for Old Icelandic, given that case attraction occurs with relative pronouns in other Germanic languages (for details, see §4.1). The second assumption is that *sá* has only recently been reanalyzed as a relative pronoun in Old Icelandic, so that the relative and demonstrative uses of *sá* continue side by side. This explains why *sá* sometimes shows distributional properties of a relative pronoun (e.g. preceding the relative clause) and other times behaves as a demonstrative pronoun (preceding the antecedent). I propose that these two assumptions are related: case attraction represents an intermediate stage in the reanalysis from demonstrative pronouns to relative pronouns, and it is this intermediate stage that is captured by literary Old Icelandic. Unlike the development in German, however, in which case attraction declined and the pronoun in question became an unambiguous, nonattracting relative pronoun, in Icelandic the relative use of *sá* achieved the final stage of the reanalysis just as it was being fully replaced by the uninflected relative complementizer *sem*. Because nonattracting *sá* disappeared shortly after it entered the final stage of its development, we are left with the false impression that the reanalysis of *sá* from a demonstrative to a relative pronoun got stuck in the transitional, case-attraction stage.

The data in this article are drawn from the Icelandic Parsed Historical Corpus (IcePaHC v. 0.9; Wallenberg et al. 2011), which spans the whole history of Icelandic from the twelfth to the twenty-first centuries. With a coding query written in the Corpus Search language (Randall 2009), I extracted 26,110 DPs from IcePaHC, over 10,400 of which contain a relative clause and over 15,600 of which contain a demonstrative but no relative clause. Each DP is tagged for: type of relative particle; type of demonstrative; presence or absence of a relative clause; position of the demonstrative vis-à-vis any antecedent noun, adjective, quantifier, possessor, other demonstrative, or relative clause; case of the antecedent noun, demonstrative, and trace in the relative clause; and century. The results were loaded into R (R Core Team 2013) for analysis.

In this article, I use the terms ‘demonstrative’ and ‘relative’ pronoun as follows.

(5)

	TERM	STRUCTURE
a.	demonstrative	{*sá*} NP_i {*sá*} [$_{CP}$ *pro*$_i$ [$_C$ *er/sem* … e_i
b.	case-attracting relative	NP_i [$_{CP}$ *sá*$_i$ [$_C$ *er/sem* … e_i
c.	nonattracting/true relative	NP_i [$_{CP}$ *sá*$_i$ [$_C$ *er/sem* … t_i

[7] I take up Wagener’s arguments against the relative analysis of *sá* in §3.5 below.

The demonstrative in 5a is part of the matrix DP and can either precede or follow the matrix N.[8] Demonstratives can have a number of functions, including extralinguistic deixis (referring to a referent in the real world) and intralinguistic reference, either anaphorically to a referent earlier in the linguistic context or cataphorically to a following relative clause (the semantics of each Old Icelandic demonstrative is discussed in §2.1 below). Relative pronouns, by contrast, are in the relative clause. I argue in §4 below that case-attracting relative pronouns are generated in the highest projection of the CP layer of the relative clause (5b), while true relative pronouns are generated in the position of the relativized argument and WH-move to Spec-CP (5c).[9] I argue that the original function of *sá* was as a demonstrative (5a), a function that continues into Modern Icelandic. Alongside that demonstrative use of *sá*, it was reanalyzed in some contexts as a case-attracting relative in Old Icelandic (5b). In early-modern Icelandic, there is evidence that *sá* was further reanalyzed to a nonattracting relative pronoun (5c), a function that disappeared from the language by the modern period.

Distinguishing demonstratives from relative pronouns in Old Icelandic is not, however, always clear cut. Setting aside case, relative pronouns can be distinguished from demonstratives in three ways: (i) relative pronouns are in the embedded clause, while demonstratives are outside it; (ii) relative pronouns are an argument of the embedded clause, while demonstratives have deictic or referential properties (Wagener 2017); and (iii) relative pronouns are unstressed, while demonstratives may be stressed (Diessel 1999:121). But on these criteria, many instances of *sá* are ambiguous between a demonstrative and relative pronoun, because Icelandic demonstratives can appear in various positions within the DP, demonstrative *sá* can cataphorically refer to a relative clause, and information about stress is not recoverable in prose texts. Therefore, I consider *sá* an unambiguous demonstrative if it has the deictic or contrastive semantics of a demonstrative determiner, regardless of word order. It is also categorized as an unambiguous demonstrative if it is nonadjacent to the relative clause. When *sá* occurs between the matrix N and the relative clause, I consider it ambiguous between a cataphoric demonstrative and a case-attracting relative pronoun. *Sá* is considered an unambiguous relative pronoun if it is at the beginning of the relative clause but nonadjacent to the antecedent DP, if there is evidence from punctuation or metrics that it belongs prosodically with the relative clause, or if it fails to show case attraction.

I next present the basic distribution of the various relative particles and demonstrative/relative pronouns in the history of Icelandic (§2). This part of the study largely confirms the developments mentioned in previous studies such as Nygaard 1905 and Thráinsson 1980. In §3, I use a number of diagnostics to demonstrate that in Old Icelandic, while it is often ambiguous, *sá* can sometimes be in the relative clause: that is, it can be a case-attracting relative pronoun, contra Wagener 2017. Section 4 then compares Old Icelandic case attraction to that in the other Germanic languages and accounts for case attraction as the result of the reanalysis of *sá* from a demonstrative to a relative pronoun. Finally, I discuss the development of *sá* in terms of grammaticalization, cyclic change, and the doubly filled COMP filter (§5) and then briefly conclude (§6).

[8] I assume the DP hypothesis of Abney 1987. Throughout, I use 'NP' to indicate a projection that contains N but not D, as in 5a, except when reporting on studies that do not assume the DP hypothesis.

[9] While 5b and 5c appear to be structurally identical, I argue in §4 that Old Icelandic has a split-CP system and that case-attracting and nonattracting *sá* are in different Specs of the CP layer.

2. Basic diachronic trends.

2.1. Distribution of demonstrative pronouns in relative contexts. As mentioned in §1, the relative particles *sem* and *er* are often preceded by a pronoun in Old Icelandic. This is most frequently the demonstrative *sá,* but one can also find the interrogative pronoun *hverr* or the other demonstratives *sjá*/*þessi* (hereafter simply referred to as *þessi*) or *hinn*. The paradigms for the three demonstrative pronouns are given in Tables 1–3.

	M.SG	F.SG	N.SG	M.PL	F.PL	N.PL
NOM	sá	sú	þat	þeir	þær	þau
ACC	þann	þá		þá		
DAT	þeim	þeirri	því	þeim		
GEN	þess	þeirrar	þess	þeirra		

Table 1. Paradigm for *sá* (Gordon 1988:295).

	M.SG	F.SG	N.SG	M.PL	F.PL	N.PL
NOM	sjá/þessi	sjá/þessi	þetta	þessir	þessar	þessi
ACC	þenna	þessa		þessa		
DAT	þessum	þessi	þessu	þessum		
GEN	þessa	þessar	þessa	þessa		

Table 2. Paradigm for *sjá*/*þessi* (Gordon 1988:295).

	M.SG	F.SG	N.SG	M.PL	F.PL	N.PL
NOM	hinn	hin	hitt	hinir	hinar	hin
ACC	hinn	hina		hina		
DAT	hinum	hinni	hinu	hinum		
GEN	hins	hinnar	hins	hinna		

Table 3. Paradigm for *hinn* (Gordon 1988:294–95).

Before we look at the occurrence of the pronouns in relative contexts, some discussion of the semantic differences between the three demonstratives is necessary. We begin with *þessi*, which is the proximal demonstrative ('this'). Wagener (2017:64–65) notes that *þessi* can point to a referent in the linguistic context (as an anaphor) or in the situational (extralinguistic) context. The demonstrative *sá* is argued by Wagener (2017:67) to have 'unique reference', which largely corresponds to Bickerton's (1981) features [+hearer knowledge, ±specific]. Despite the fact that *sá* has been traditionally described as a distal demonstrative 'that' (e.g. Gordon 1988:295), Wagener (2017:67) finds that it has deixis only within the linguistic context, as a so-called 'anaphoric demonstrative'. Even in relative contexts, Wagener (2017:79) claims that *sá* usually has unique reference, signaling that the reference of the antecedent is to be found in the subsequent relative clause; however, there are also some instances where *sá* lacks unique reference (Wagener 2017:124). Finally, while *hinn* is etymologically a demonstrative pronoun, by the time of Old Icelandic it had evolved into a preadjectival definite article *hinn*. According to Wagener (2017:69), *hinn* has unique reference like *sá*, but unlike *sá* it cannot be anaphoric.[10]

[10] Throughout this article, *hinn* refers to a nonclitic demonstrative/article. The clitic article, which is coded differently from the nonclitic demonstrative in IcePaHC, is referred to as *-inn* here. According to Wagener (2017:67), *-inn* differs from both *sá* and *hinn* in that it is always [+specific].

Table 4 below shows the frequency of the various pronouns occurring in the same DP as a relative clause. The counts for *sá* include instances in which *sá* is unambiguously a demonstrative, those that are ambiguous between a demonstrative and a relative interpretation (like example 4 above), and those that are argued to be unambiguous relative pronouns (details in §3). As for *þessi* (6) and *hinn* (7), I argue below that these are unlikely to be relative pronouns even when immediately preceding a relative clause, but they have been included anytime they occur in a relative context. WH-pronouns can of course be used in interrogatives, but the numbers below reflect their use as relative pronouns only, as in 8.

(6) Hafi **stafróf þetta er** hér er áður ritað
have alphabet this RP here is before written
'Let him have this alphabet that is written above (until he gets a better one)'
(1150.FIRSTGRAMMAR.SCI-LIN,.182)

(7) **in** helga **María, er** bar Drottin
the holy Mary RP bore Lord
'the holy Mary, who bore the Lord' (1150.HOMILIUBOK.REL-SER,.120)

(8) kom einn kóngur virðuligur og voldugur **hver er** hét Translatíus
came a king honorable and mighty who RP was.called T.
'came an honorable and mighty king who was called Translatius'
(1450.ECTORSSAGA.NAR-SAG,.54)

	sá	*þessi*	*hinn*	WH-pronoun	no pronoun	TOTAL
12th century	529	13	6	0	99	*647*
13th century	642	22	11	1	216	*892*
14th century	1,068	39	14	3	292	*1,416*
15th century	597	24	17	17	284	*939*
16th century	807	47	17	94	339	*1,304*
17th century	739	29	10	123	568	*1,469*
18th century	560	27	31	77	582	*1,277*
19th century	393	28	27	2	475	*925*
20th century	422	56	23	1	621	*1,123*
21st century	114	19	3	0	305	*441*
TOTAL	*5,871*	*304*	*159*	*318*	*3,781*	*10,433*

TABLE 4. Types of pronouns occurring with relative clauses by century.

The proportions for Table 4 are illustrated in Figure 1. Most relative clauses in Old Icelandic have one of the pronouns preceding the relative clause. By far the most frequent pronoun is *sá*, occurring with around 63–81% of relative clauses in the twelfth through fifteenth centuries. (Similarly, Wagener (2017:63) finds very high frequencies of *sá* before relative clauses.) The other two demonstratives and the WH-pronoun are much less frequent in relative contexts in Old Icelandic, although the WH-pronoun does experience a period of popularity from the sixteenth to the eighteenth century. Beginning in the sixteenth century, relative clauses with no pronoun become the most frequent type.

2.2. DISTRIBUTION OF THE RELATIVE PARTICLES. Next, let us examine the distribution of the relative particles (i.e. complementizers) *er* and *sem*. Table 5 gives the frequencies in each century of relative clauses introduced by *er*, *sem*, other particles (the infrequent *að*, *eð*, *sem að*, and *það*), and no particle. The proportions are illustrated graphically in Figure 2.

Throughout the history of Icelandic, *er* and *sem* exist side by side. Until 1500, *er* is the most frequent particle, although *sem* steadily increases over each century. From

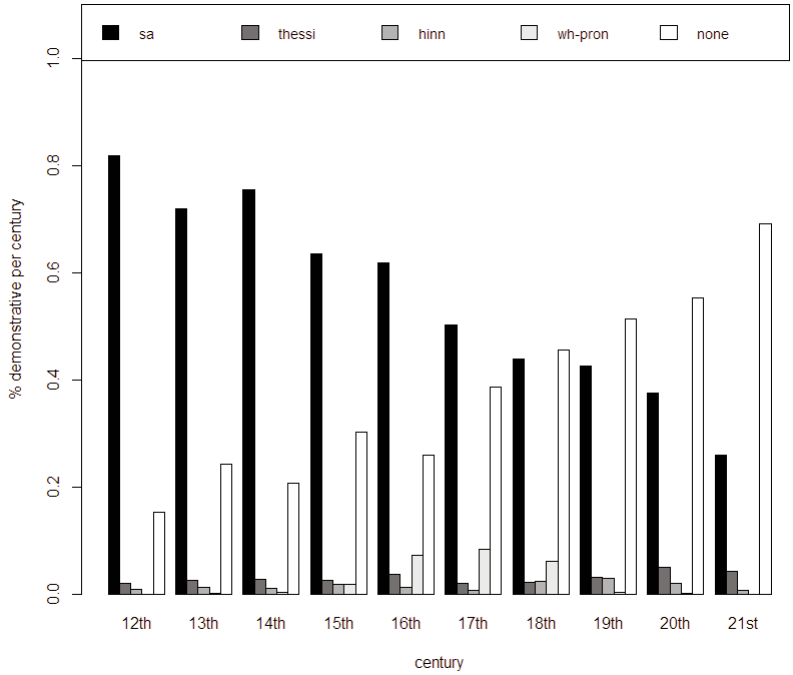


FIGURE 1. Types of pronouns preceding the relative clause by century.

	er	*sem*	others	no particle	TOTAL
12th century	620	27	0	0	*647*
13th century	774	108	7	3	*892*
14th century	1,010	386	10	10	*1,416*
15th century	549	337	24	29	*939*
16th century	387	623	82	212	*1,304*
17th century	283	875	134	177	*1,469*
18th century	208	890	53	126	*1,277*
19th century	279	635	1	10	*925*
20th century	70	1,048	0	5	*1,123*
21st century	22	417	1	1	*441*
TOTAL	*4,202*	*5,346*	*312*	*573*	*10,433*

TABLE 5. Types of relative particles by century.

1500 to 1900, *sem* occurs in about half of relative clauses, competing with *er* and the infrequent particles (see Thráinsson 1980:68 on relative *að* and *eð* and 1980:85–86 on *sem að*).

An additional possibility until the twentieth century was the option to have no relative particle at all, which occurs mostly in the religious texts of IcePaHC. Some of these involve *sá* (9). Especially in religious texts of the sixteenth and seventeenth centuries, we find relative clauses with no particle and the WH-pronoun *hverr* 'who', which does not display case attraction (10); arguably, these are an imitation of Latin relative clauses (see Thráinsson 1980:70–72).

(9) Og sá það **margir vitrir menn** **þeir** hjá honum voru
and saw that many wise men.NOM SÁ.NOM with him were
'and many wise men who were with him saw that … '
(1210.THORLAKUR.REL-SAG,.73)

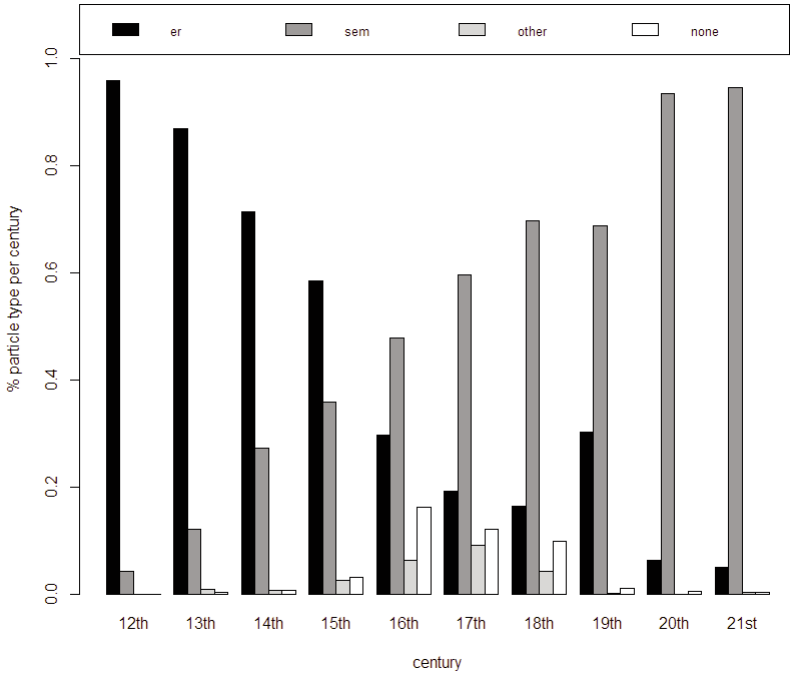


FIGURE 2. Types of relative particles by century.

(10) hrærðist **sá stað-ur, í hver-jum** þeir voru til samans safnaðir
shook that place-NOM in which-DAT they were together gathered
'that place in which they had gathered together shook'
(1540.NTACTS.REL-BIB,239.184)

In the twentieth- and twenty-first-century texts in the corpus, *sem* dominates, with the only other option being the increasingly rare *er*, which Thráinsson (1980:96) states is formal in Modern Icelandic.

To sum up this section, there are two main developments in the history of Icelandic relative clauses. First, and most important for this article, is the high frequency of the supposed demonstrative pronoun *sá* in the context of relative clauses in Old Icelandic, followed by its decline. The next section argues that *sá* in relative contexts has been reanalyzed as a relative pronoun, albeit a case-attracting one. The second development is the decline of the relative complementizer *er* (along with some minor patterns) in favor of the relative complementizer *sem*. I claim that these two developments are related in the following way. As argued in §4, *sá* achieves the final stage of the reanalysis of *sá* to a more typical, nonattracting relative pronoun only in the seventeenth century, just as *sem* is beginning to take over as the sole marker of relative clauses.

3. OLD ICELANDIC *SÁ* AS A RELATIVE PRONOUN. Having seen the basic diachronic developments in relative clauses over the history of Icelandic, we now look more closely at the high rate of *sá* before relative clauses in Old Icelandic (twelfth to fifteenth centuries).[11] I argue that *sá* frequently precedes relative clauses because it is specialized as

[11] The Old Icelandic period is conventionally cut off in the fourteenth century. However, I have extended my queries into the fifteenth century, because both *sá* and *er* continue to be frequently used with relative clauses until around 1500. The number of tokens (DPs with a relative clause and/or a demonstrative) in this subset of the database is over 9,000, of which over 4,200 contain a relative clause.

introducing relative clauses, either as a cataphoric demonstrative in the antecedent DP, or in some cases as a case-attracting relative pronoun.

There are several reasons to believe that *sá*, when it occurs immediately before a relative clause, has developed a specialized function of introducing relative clauses. First, I show that *sá* behaves differently from other demonstratives, in that only *sá* frequently occurs with relative clauses (§3.1), and then that, unlike the other demonstratives, it frequently lacks definiteness and demonstrative force when preceding a relative clause (§3.2). Section 3.3 argues that when a relative clause follows, *sá* is found in a number of word orders vis-à-vis elements in the matrix DP that are otherwise not seen. Some prosodic evidence from the philological record, which is the clearest indication that *sá* can be a relative pronoun, is examined in §3.4. Finally, I address some recent arguments that *sá* is not a relative pronoun (§3.5).

3.1. *Sá* AND OTHER DEMONSTRATIVES. First, recall from §2.2 that *sá* is by far the most common demonstrative in DPs also containing a relative clause. In fact, of the 4,371 instances of *sá* in the twelfth- to fifteenth-century texts of IcePaHC, 65% occur with a relative clause. Compare this to the other two demonstratives in Table 6, which occur with relative clauses only 3–4% of the time.

RELATIVE CONTEXT?	*sá*	*þessi*	*hinn*	TOTAL
relative clause	2,836 (65%)	98 (4%)	48 (3%)	*2,982*
no relative clause	1,535 (35%)	2,279 (96%)	1,352 (97%)	*5,166*
TOTAL	*4,371*	*2,377*	*1,400*	*8,148*

TABLE 6. Old Icelandic demonstratives in relative and nonrelative contexts.

When *þessi* and (nonclitic) *hinn* occur in the same DP as a relative clause, they appear to preserve their basic functions discussed in §2.1 above. The demonstrative *þessi* preserves its proximal deixis as in 6 above, and *hinn* precedes an adjective as in 7. However, when *sá* occurs before a relative clause, it very often has no demonstrative meaning.

(11) hver tunga hefir **hljóð þau er** eigi finna-st í annarri.
each tongue has sounds SÁ RP not find-PASS in another
'every language has (*those) sounds that are not found in others'
(1150.FIRSTGRAMMAR.SCI-LIN,.5)

In examples like 11, it seems that *sá* merely anticipates the following relative clause. However, it is entirely possible that *sá* here is still syntactically a demonstrative, given the fact that in Old Icelandic, demonstratives can precede or follow the head N. Even less clear are the instances where there is no antecedent N, as in 12a. One could interpret *sá* as a demonstrative, in which case it serves as the antecedent of the relative clause (12b). Alternatively, one could interpret such cases as free (headless) relatives: if correct, there is no antecedent, and *sá* is part of the relative clause (12c).

(12) a. hún gjörði-st verð að bera **þann er** oss leysti
she made-REFL worthy to bear SÁ.ACC RP [e].NOM us saved
'she made herself worthy to bear him, who saved us … '
(1150.HOMILIUBOK.REL-SER,.51)

b. demonstrative pronoun: að bera **þann** [$_{CP}$ [e] **er** oss leysti]

c. relative pronoun: að bera [$_{CP}$ **þann er** oss leysti]

Setting aside free relatives, the frequent occurrence of *sá* with relative clauses, together with the fact that this use of *sá* can lack demonstrative semantics, indicates that *sá* has a specialized function in relative contexts, besides its original use as a demonstrative. Lindblad (1943) and Wagener (2017) argue that this use of *sá* merely refers to

the following relative clause but is not a relative pronoun inside the relative clause. Whether *sá* is a cataphorically referring demonstrative pronoun or a relative pronoun is thus a purely syntactic question and is difficult to decide on semantic grounds. After a brief discussion of the semantics of *sá* in the presence of a relative clause (§3.2), I therefore present word-order evidence that *sá* is sometimes a cataphoric demonstrative but other times a case-attracting relative pronoun (§3.3). While much of these data are ambiguous, §3.4 presents prosodic evidence for *sá* as a case-attracting relative pronoun.

3.2. THE SEMANTICS OF *SÁ* IN RELATIVE CONTEXTS. In many cases, it is difficult to directly determine the semantics of *sá* in historical texts. If the antecedent is definite, it is difficult to rule out the possibility that *sá* retains its demonstrative semantics, modifying the antecedent N. Recall example 4, repeated here as 13, where the antecedent Herod contrasts with one of his sons, also named Herod. It is thus possible to read *þess* as an anaphoric demonstrative ('that Herod'). But because Herod is a proper name, it does not need a determiner to mark it as definite, so *þess* could be a correlative/cataphorically referring demonstrative, merely anticipating the relative clause, or it could even be a genuine relative pronoun (representing the relativized argument of the embedded clause).

(13) synir **Herodis þess, er** börnum lét fara. [= 4]
sons H. SÁ RP children let kill
demonstrative: ' … sons of that Herod, who had the children killed.'
(cor)relative: ' … sons of Herod, who had the children killed.'

Consequently, post-N *sá* is often semantically and structurally ambiguous between a demonstrative and a relative pronoun.

Wagener (2017:124) claims that while *sá* usually has 'unique reference' (see §2.1 above), some instances of *sá* preceding relative clauses fail to refer uniquely. Such cases show that *sá* has added a function of introducing a relative clause, either as a cataphoric demonstrative or as a relative pronoun. However, because referentiality is not coded in IcePaHC, I have not been able to directly replicate Wagener's result in my corpus. Nor does Icelandic have obligatory indefinite articles, so most indefinite Ns are not marked, making them impossible to find through an automated search. Nevertheless, in reading over examples, I have identified a few in which an unmarked, indefinite DP contains both *sá* and a relative clause.

(14) a. Hann setti **jarl** í hverju fylki, **þann er** dœma skyldi lǫg [= 3]
he set earl in each district SÁ RP judge should law
'He placed an earl in each district, who should judge the law.'
*'He placed an earl in each district, the one who should judge the law.'
b. hver tunga hefir **hljóð þau er** eigi finna-st í annarri. [= 11]
each tongue has sounds SÁ RP not find-PASS in another
'every language has sounds that are not found in others'
*'every language has those sounds that are not found in others'
c. áttu þau **son þann er** Gunnbjörn hét
had they son SÁ RP G. was.called
'they had a son who was called Gunnbjörn'
*'they had that son who was called Gunnbjörn'
(1350.FINNBOGI.NAR-SAG,652.1520)

In 14a, *jarl* is clearly indefinite, as the particular earl that has been assigned to any given district is unknown to the reader. In 14b, the particular sounds that each language has are not specified, and are thus unknown to the reader and indefinite. In 14c, *son* must be indefinite, because Gunnbjörn has not yet been introduced to the discourse, nor

does the couple have another son named Gunnbjörn who is an alternative to this Gunnbjörn. In these (admittedly few) clear cases, *sá* is [−hearer knowledge] and therefore does not have Wagener's 'unique reference'. Lacking the original function of demonstrative *sá*, here *sá* simply refers to the relative clause (if a cataphoric demonstrative) or is part of the relative clause (if a relative pronoun).

One way to automatically identify instances in which *sá* seems to occur in an indefinite DP is to search for those cases in which *sá* occurs with *einn* (ambiguous between the numeral 'one' and an indefinite, specific determiner 'a certain'; see Faarlund 2004: 74). Beginning with *einn*, we first need to rule out examples where it is the numeral 'one', as these are not necessarily indefinite. Indeed, many instances of *einn* occurring with a demonstrative involve the numeral *einn* as in 15, which is to be expected because a demonstrative determiner and indefinite marker should not cooccur. In all such cases, *sá* precedes the N (mostly the order D > *einn* > N but also a few instances of *einn* > D > N), indicating that *sá* is a true demonstrative here.

(15) Nú er **sá einn hlutur er** óskilað er.
now is SÁ EINN part RP undecided is
'Now there is that one thing that is not decided.'
(1350.BANDAMENNM.NAR-SAG,.172)

In other examples, *einn* is not the numeral 'one' but a determiner with indefinite, specific reference, in other words [−hearer knowledge, +specific]. In such cases, *sá* is incompatible with the [+hearer knowledge] interpretation that is for Wagener (2017) the main function of demonstrative *sá*. In many of these cases the noun in question is clearly discourse-new, because the relative clause specifies the name, as in 16.[12] In all fifteen examples of this, *sá* immediately precedes the relative clause, suggesting a close connection between this pronoun and the relative clause.

(16) og koma þeir of kveld-ið til **búanda eins, þess er** Atli hét,
and come they at evening-the to farmer EINN SÁ RP Atli was.called
'and they went in the evening to a certain farmer who was called Atli'
*'and they went in the evening to one farmer, the one who was called Atli'
(1260.JOMSVIKINGAR.NAR-SAG,.1053)

Another way to identify indefinite DPs with *sá* is by searching for the occurrence of *sá* with indefinite quantifiers such as *enginn* 'none', *nokkur* 'some', and *margr* 'many'.[13] These occur in the same DP as *sá* thirty-four times in my corpus, but all instances of this also contain a relative clause. Again, this shows that *sá* does not have its original demonstrative function here, but merely introduces a relative clause. When *sá* is not adjacent to the relative clause, it must be a cataphoric demonstrative (17a), and when it immediately precedes the relative particle, it is structurally ambiguous between a cataphoric demonstrative and a genuine relative pronoun (17b).

[12] Heusler (1950:160–61) makes a similar claim, pointing out that the woman in example (i) is unknown at this point in the story.

(i) þá fundo menn hans **kono, þá er** þeir hǫfþo enga sét íafnvæna
then found men his woman SÁ RP they.had none seen equally.beautiful
'then his men found a woman, such that they had never seen an equally beautiful one'

[13] I thank a referee for this suggestion. Similar examples are given by Faarlund (2004:85) and Dyvik (1979: 56).

(17) a. að ... var **engi sá riddari að** nokkura íþrótt þyrfti við þá að
that was none SÁ knight RP any sport needed against him to
prófa.
try
'that there was no knight who needed to compete against him in any sport' (1480.JARLMANN.NAR-SAG,.23)

b. að hann leyndi **bréfi nokkuru, því er** honum hafði sent einn af
that he hid letter some SÁ RP him had sent one of
riddurum
knights
'that he hid some letter, which one of the knights had sent him'
(1300.ALEXANDER.NAR-SAG,.496)

These examples of *sá* occurring in an indefinite DP are in line with Wagener's finding that *sá* can lack unique reference in the presence of a relative clause. I interpret this to mean that in such examples, *sá* merely anticipates the relative clause as a cataphoric demonstrative or is part of the relative clause as a relative pronoun.

3.3. RELATIVE *SÁ* AND DEMONSTRATIVE *SÁ* HAVE DIFFERENT WORD ORDERS IN THE DP. In previous sections, we have seen that *sá* is much more likely than other demonstratives to occur with a relative clause and that it can lack its usual referential properties in such instances. In this section, I present word-order evidence that the *sá* that precedes relative clauses behaves differently from *sá* in nonrelative contexts.

N > *SÁ*. First of all, note that demonstratives typically appear before their nouns in Icelandic: Table 7 shows that of the 2,561 instances of *sá* and an N in the Old Icelandic subset of the corpus, 1,885 have *sá* (directly or indirectly) preceding N. These cases of *sá* preceding the noun are about evenly split into relative contexts (42%) and DPs with no relative (58%). These are clearly demonstratives, because even those that occur with a relative clause are separated from the relative clause by the head N, as in 18.[14]

(18) **Sá stafur er** hér [er] ritinn c
the letter RP here is written c
'The letter that here is written *c*' (1150.FIRSTGRAMMAR.SCI-LIN,.111)

RELATIVE CONTEXT?	*sá* > N	N immed. > *sá*	N > *sá*	TOTAL
relative clause	800 (42%)	529 (88%)	76 (97%)	*1,405*
no relative clause	1,085 (58%)	69 (12%)	2 (3%)	*1,156*
TOTAL	*1,885*	*598*	*78*	*2,561*

TABLE 7. Order of Old Icelandic *sá* and N in relative and nonrelative contexts.

By contrast, *sá* following the N is very likely to occur with a relative clause.[15] Of the instances of *sá* immediately following the N, 88% occur in relative contexts; most of these (508 of the 529) are directly before the relative clause. These are syntactically and semantically ambiguous between a cataphorically referring demonstrative and a relative pronoun, as in examples 14b–c. The remaining twenty-one examples, not directly before a relative clause, are not compatible with an analysis as relative pronouns; such examples must involve cataphoric demonstrative *sá*.

[14] The second instance of *er* in this example, which is the third singular present of *vera* 'to be', is missing in IcePaHC but is present in other editions, for example, https://etext.old.no/gramm/.

[15] Heusler (1950:159–60) also finds that *sá* can occur in the middle of the matrix clause or directly before the relative clause.

(19) Vér eigum **dag þann** fyr hendi, **er** dómadagur heitir.
we have day SÁ at hand RP doomsday calls
'We have that/the day at hand that is called doomsday.'
(1150.HOMILIUBOK.REL-SER,.940)

Finally, of the seventy-eight instances of *sá* following the N with some words between the two ('N > *sá*' in Table 7), seventy-six occur with (and all but one of those immediately precede) a relative clause; being adjacent to the relative clause and not the N, *sá* clearly is not in the matrix DP. We have already seen one such example (14a); recall that *jarl* is semantically indefinite, and notice that *sá* is separated from *jarl* by a prepositional phrase. In the following additional example, *sá* is not needed for reference because the antecedent *búnað* is already universally quantified; moreover, it is positioned adjacent to the relative clause rather than the antecedent.

(20) Tekur hún af **allan búnað** af barn-inu **þann sem** á var
takes she off all clothing from child-the SÁ RP on was
*'She removes from the child all clothing, that which was on it.'
'She removes from the child all clothing that was on it.'
(1350.FINNBOGI.NAR-SAG,626.103)

Åfarli (1995:539) claims that sentences like 14a and 20 are the clearest syntactic evidence for *sá* as a relative pronoun, because *sá* and the relative clause have been extraposed together. In other words, in these examples *sá* is part of the same constituent as the relative clause.

(20′) Tekur hún af [$_{DP}$ **allan búnað** [t_i]] af barninu [$_{CP}$ **þann sem** á var]$_i$

However, there is another possible analysis of such clauses: it is theoretically possible that *sá* here is the head of its own DP which is in apposition to *búnað*, in which case *sá* alone is the antecedent of the relative clause.[16]

(20″) Tekur hún af [$_{DP}$ **allan búnað**] af barninu [$_{DP}$ **þann** [$_{CP}$ **sem** á var]]

Because the relative clauses in 14a and 20 are restrictive, I find the apposition analysis (as in 20″) unlikely in both of these cases. Therefore, while some instances of *sá* plus relative clause might be explained away as involving a DP in apposition, there are at least these two clear examples showing that *sá* can be extraposed with the relative clause of which it is a part.

To sum up, extraposition indicates that *sá* is sometimes a cataphoric demonstrative and other times a relative pronoun. On the one hand, there are examples like 19 which clearly indicate that *sá* remains with the antecedent when the relative clause is extraposed (see also Wagener 2017:57). On the other hand, there is also some clear evidence that *sá* can extrapose as part of a relative clause, in other words as a relative pronoun (14a, 20).

ADJ > N > *SÁ* AND N > ADJ > *SÁ*. Although there are several possible orders of an N, an Adj, and *sá* in Icelandic, some orders appear to be favored in relative contexts (Table 8). Beginning with orders that occur in all kinds of contexts, the order *sá* > Adj > N (21a), by far the most frequent order, actually occurs somewhat less frequently with relative clauses (42%) than in nonrelative contexts (58%). Similarly, the order N > *sá* > Adj (21b) occurs both in relative (58%) and nonrelative contexts (42%). Even in the presence of a relative clause, it is not possible that *sá* represents a relative pronoun in these orders, as it does not immediately precede the relative clause.

[16] I thank a referee for pointing out this possibility.

(21) a. Og nú hittir konungur **þann inn lend-a mann er** hennar hafði
and now meets king SÁ the landed-WK man RP her had
beðið
waited
'And now the king meets that landed man, who had waited for her'
(1275.MORKIN.NAR-HIS,.103)

b. Í **stað þeim, góð-um og dýrleg-um, er** í Reykjaholti heitir
in place SÁ good-ST and glorious-ST RP in R. calls
'In that place, good and glorious, which is called í Reykjaholti … '
(1210.JARTEIN.REL-SAG,.332)

As further evidence that preadjectival *sá* is a demonstrative, note that the adjective following *sá* usually inflects as weak (21a), although there are a few examples of strong adjectives in this position (21b). Typically, determiners in Icelandic occur with a weakly inflected adjective, so the presence of weak adjectives after *sá* indicates that it is a cataphoric demonstrative here rather than a relative pronoun.

RELATIVE CONTEXT?	*sá* > Adj > N	N > *sá* > Adj	Adj > N > *sá*	N > Adj > *sá*	TOTAL
relative clause	55 (42%)	7 (58%)	38 (97%)	3 (100%)	*103*
no relative clause	76 (58%)	5 (42%)	1 (3%)	0 (0%)	*82*
TOTAL	*131*	*12*	*39*	*3*	*185*

TABLE 8. Order of Old Icelandic *sá*, Adj, and N in relative and nonrelative contexts.

However, two other orders, Adj > N > *sá* (22a) and N > Adj > *sá* (22b), are much more likely to precede a relative clause than not: out of forty-two occurrences of these two orders, all but one are followed by a relative clause. Crucially, these are the orders where *sá* immediately precedes the relative clause.

(22) a. græddi þar **sjúk-a menn þá sem** til hennar voru færðir,
healed there sick-ST men SÁ RP to her were led
'there she healed (the) sick men that were led to her'
(1350.MARTA.REL-SAG,.580)

b. gjalda honum einn **penning heil-an**, **þann er** denarius heitir.
give him one penny whole-ST SÁ RP denarius is.called
'give him one whole coin that is called denarius'
(1150.HOMILIUBOK.REL-SER,.1003)

Interestingly, in all of the examples in which *sá* follows an adjective but precedes the relative clause, *sá* fails to trigger weak inflection on the adjective; this seems to indicate that these instances of *sá* are not in the matrix DP.[17] The generalization emerges that demonstrative *sá* (in both relative and nonrelative contexts) precedes an adjective, while postadjectival *sá* has no effect on the adjective's inflection and occurs almost exclusively in relative contexts, providing another piece of evidence that *sá* can be a relative pronoun.

UNIVERSAL Q > *SÁ*. It appears that the universal quantifiers *allr* 'all' and *hverr* 'each' can occur with *sá* in all six logically possible word orders. Two particular orders are very strongly favored when a relative clause follows: all instances of the orders Q > N > *sá* (23a) and N > Q > *sá* (23b) occur with a relative clause (see Table 9). Again, these are the two orders with the pronoun last, supporting the idea that in these cases the pronoun in question is closely connected to the relative clause.

[17] I thank a referee for prompting me to investigate the inflection of these adjectives.

(23) a. og **öllum ríkismönnum þeim sem** þar voru gaf hann …
and all nobles SÁ RP there were gave he
'and to all nobles that were there, he gave … '
(1350.FINNBOGI.NAR-SAG,646.1183)

b. að brenna **borgir allar þær, er** í nánd voru
to burn castles all SÁ RP in area were
'to burn all the castles that were nearby'
(1300.ALEXANDER.NAR-SAG,.1104)

RELATIVE CONTEXT?	Q > N > *sá*	N > Q > *sá*	other 4 orders	TOTAL
relative clause	39 (100%)	6 (100%)	81 (78%)	*125*
no relative clause	0 (0%)	0 (0%)	23 (22%)	*24*
TOTAL	*39*	*6*	*104*	*149*

TABLE 9. Order of Old Icelandic *sá*, *allr*/*hverr*, and N in relative and nonrelative contexts.

The other four logically possible word orders, in which *sá* precedes either N or Q, can occur in both relative and nonrelative contexts. Thus as with adjectives, linearizations of N, Q, and *sá* in which *sá* is the final element are limited to relative clauses, suggesting that *sá* here is a relative pronoun, or at least a cataphoric demonstrative.

N > POSS > *SÁ* AND POSS > N > *SÁ*. Cooccurrence with a relative clause has no effect on certain word orders in DPs with *sá* and a possessive or genitive: these occur with near-equal frequency in relative (49%) and nonrelative (51%) contexts. The two orders in which *sá* is at the end of the string, however, occur only when a relative clause follows: N > possessive > *sá* (24a) and possessive > N > *sá* (24b), as seen in Table 10.

(24) a. hann hafði lausa látið **menn Sturlu þá er** teknir voru …
he had loose let menn Sturla's SÁ RP taken were
'he released Sturla's men that had been captured…'
(1250.STURLUNGA.NAR-SAG,409.756)

b. sýnast láta **hans mildiverk það** er eitt var af mörgum öðrum.
appear let his mercy SÁ RP one was of many others
'(God wanted to) let his mercy appear, which was one of many.'
(1210.THORLAKUR.REL-SAG,.490)

RELATIVE CONTEXT?	N > Poss > *sá*	Poss > N > *sá*	other 4 orders	TOTAL
relative clause	23 (100%)	10 (100%)	25 (46%)	*58*
no relative clause	0 (0%)	0 (0%)	29 (54%)	*29*
TOTAL	*23*	*10*	*54*	*87*

TABLE 10. Order of Old Icelandic *sá*, possessor, and N in relative and nonrelative contexts.

Once again, we find that *sá* can precede an N or its modifier in both relative and nonrelative contexts, but string-final *sá* occurs only in the presence of a relative clause, suggesting a specialized function of introducing relative clauses.

N+DEF > *SÁ*. Finally, *sá* can occur with an N that has the clitic definite article *-inn*. When *sá* precedes the definite N, this order occurs about equally frequently in relative and nonrelative contexts (Table 11). However, the order N-*inn* > *sá* occurs only before a relative clause, as in 25.

(25) norður eftir **forskála-num þeim sem** til kirkju er.
north toward antechamber-the SÁ RP at church is
'north toward the antechamber that belongs to the church'
(1250.STURLUNGA.NAR-SAG,448.2148)

RELATIVE CONTEXT?	*sá* > N-*inn*	N-*inn* > *sá*	TOTAL
relative clause	18 (50%)	32 (97%)	*50*
no relative clause	18 (50%)	0 (0%)	*18*
TOTAL	*36*	*32*	*68*

TABLE 11. Order of Old Icelandic *sá* and definite-marked N in relative and nonrelative contexts.

There is one exception (not counted in Table 11), in which *sá* follows the definite-marked N but is not in a relative context. This is because *sá* precedes the free-standing determiner *hinn* plus an adjective, and thus it is actually of the type N > *sá* > Adj discussed above.

(26) Hvort hefir **hirð-in sú in danska** eigi allfast staðið fyrir þér?
whether has guard-the SÁ the Danish not firmly stood before you
'Has not that Danish bodyguard stood firmly before you?'
(1275.MORKIN.NAR-HIS,.450)

As in the other constructions discussed in this section, while *sá* before a definite N or a modifier of a definite N can occur freely in relative and nonrelative contexts, *sá* at the end of a string containing a definite-marked N only occurs in relative contexts and is thus either a cataphoric demonstrative or a relative pronoun.

3.4. PROSODIC ARGUMENTS FOR *SÁ* AS A RELATIVE PRONOUN. Having investigated the various word-order constellations in which *sá* can appear, I now examine prosodic arguments that *sá* is more closely associated with the relative clause than with the matrix N. I do this in two ways. First, in prose texts, a comma can indicate a boundary between two intonational phrases, which may correspond to a clause boundary (Selkirk 2005). (For more on the mapping of syntactic phases onto prosody, see Kratzer & Selkirk 2007.) Similarly, in Old Norse poetry, it has been argued since Kuhn 1933 that clause boundaries often correspond to line breaks; for example, Gade (1995:209–10) finds that clauses usually start at the beginning of odd lines and often terminate at the end of even lines. Second, *sá* and *er* can cliticize, forming a single prosodic unit, which may be spelled as *sás*. In poetry, even if the manuscript spells *er* separately from *sá*, the strict syllable-counting and stress rules of Old Norse poetry can help determine whether *er* was actually a clitic in the spoken performance of the poem. These two prosodic criteria are the clearest indication of whether *sá* in a particular instance is a cataphoric demonstrative or a case-attracting relative pronoun.

According to Lindblad's study of Old Norse (ON, including Old Swedish and Old Danish) relative clauses, punctuation in manuscripts tends to precede *sá er*, which would indicate that manuscript writers perceived of *sá* as being in the relative clause rather than the matrix DP. Moreover, manuscripts often spell *sá er* as a single word *sás* (Lindblad 1943:163), indicating the cliticization noted above. Although he gives no numbers for Old Icelandic, Lindblad (1943:163–64) finds that punctuation in Old Swedish laws precedes *sá er* over 200 times but intervenes between *sá* and *er* only eighteen times.

I tested Lindblad's claim in Old Icelandic prose by querying the position of commas with respect to *sá* and *er*.[18] However, my study of IcePaHC yields very different results from Lindblad's, as shown in Table 12. The comma is placed between *sá* and *er* 187 times, more than three times more frequently than comma placement before *sá* and *er*, which occurs just fifty-six times. If taken at face value, this would indicate that there are 187 cases in which *sá* is part of the matrix DP as a cataphoric demonstrative and fifty-

[18] Corpus Search queries for this require setting ignore_nodes to null and adding terms like (D* iprecedes ,) AND (, iprecedes CP-REL*) to the query.

six in which it is probably a relative pronoun (or perhaps the head of an appositive DP). However, three caveats are in order. First, the majority of instances where *sá* is followed by a relative clause (1,759 of 2,228, i.e. 79%) do not contain a comma at all; thus punctuation is at best a very minor criterion for the status of *sá*. Second, the results vary wildly by text: most texts have few or no examples of punctuation before the relative clause, a few texts (*Hómilíubók*, *Jartein*, *Alexander)* strongly prefer the comma between *sá* and *er*, and other texts (*Jómsvíkingar*, *Marta*) strongly prefer the comma before *sá er*. Third, many of the texts in IcePaHC are based on normalized editions, and thus comma placement between *sá* and *er* may reflect the grammatical intuitions of a modern Icelandic editor rather than those of the Old Icelandic writer; this may help explain some of the variation among texts. Thus while the fifty-six instances of comma placement before *sá er* in IcePaHC suggest that these cases involve a relative pronoun, there are many more relative clauses in which the punctuation does not help disambiguate the status of *sá*.

TEXT	, > *sá* > RC	*sá* > , > RC	other	no comma	TOTAL
1150.FIRSTGRAMMAR.SCI-LIN			1	37	*38*
1150.HOMILIUBOK.REL-SER	27	84	74	166	*351*
1210.JARTEIN.REL-SAG	1	12	10	63	*86*
1210.THORLAKUR.REL-SAG			8	90	*98*
1250.STURLUNGA.NAR-SAG			2	65	*67*
1250.THETUBROT.NAR-SAG				18	*18*
1260.JOMSVIKINGAR.NAR-SAG	9		6	83	*98*
1270.GRAGAS.LAW-LAW			4	72	*76*
1275.MORKIN.NAR-HIS			1	57	*58*
1300.ALEXANDER.NAR-SAG	7	89	101	39	*236*
1310.GRETTIR.NAR-SAG	1			66	*67*
1325.ARNI.NAR-SAG			3	203	*206*
1350.BANDAMENNM.NAR-SAG				42	*42*
1350.FINNBOGI.NAR-SAG			2	65	*67*
1350.MARTA.REL-SAG	10	1	4	185	*200*
1400.GUNNAR.NAR-SAG			1	25	*26*
1400.GUNNAR2.NAR-SAG				5	*5*
1400.VIGLUNDUR.NAR-SAG				35	*35*
1450.BANDAMENN.NAR-SAG				24	*24*
1450.ECTORSSAGA.NAR-SAG	1		1	110	*112*
1450.JUDIT.REL-BIB				27	*27*
1450.VILHJALMUR.NAR-SAG				133	*133*
1475.AEVINTYRI.NAR-REL		1	7	60	*68*
1480.JARLMANN.NAR-SAG			1	89	*90*
TOTAL	*56 (3%)*	*187 (8%)*	*226 (10%)*	*1,759 (79%)*	*2,228*

TABLE 12. Commas in Old Icelandic DPs containing *sá* and a relative clause.[19]

Turning now to ON poetry, Lindblad (1943:162) also investigates relative clauses in poetry and finds that *sá* tends to occur in the same line as the relative clause. Taking the metrical break to indicate a syntactic boundary, Heusler (1950:161) claims that when *sá* immediately precedes the relative clause, it belongs to the relative clause. He shows that *sá* can occur in the unstressed, line-initial position, arguing that this *sá* is a 'proclitic'. In Sapp 2018, I have conducted a comprehensive examination of relative clauses

[19] The 'other' column includes some instances where the comma separates the main clause from the subordinate clause but is not adjacent to *sá*, as in 15. In other cases, the punctuation is irrelevant to the status of *sá* (e.g. occurring after the relative clause).

in Eddic and skaldic verse.[20] While the data from that study are quite complex, the following brief discussion supports the claims by Lindblad and Heusler.

In the Eddic corpus, which consists of anonymous, undated poems, there are just four relative clauses with *sem* but 367 clauses with *er*. In the skaldic corpus, of which I examine only datable poems by known skalds, there are nine relative clauses with *sem* and 294 with *er*. More than half of these clauses are preceded directly or indirectly by the pronoun *sá*, with a small number preceded by *hinn* and none by *þessi*. Of those with *sá*, the vast majority have *sá* adjacent to *er* and in the same poetic line, confirming Lindblad's finding. In fact, there is a strong tendency for *sá* and *er* to be in anacrusis, that is, in the unstressed position at the beginning of the poetic line.

(27) þaðan koma **dǫggvar,** / **þær-s** í dala falla
thence come dews SÁ-RP in dales fall
'From there come the dews, which fall in the dales' (*Völuspá* 19)

The fact that *sá* and *er* are so often in anacrusis suggests that in these cases, *sá* is a relative pronoun. First, the line-initial position suggests that *sá* is at the beginning of the relative clause. Second, *sá* in anacrusis is unstressed; according to Diessel (1999:121), relative pronouns must be unstressed, while demonstratives can be stressed. While these first two criteria are also compatible with a demonstrative analysis (*sá* could be an unstressed demonstrative that acts as the antecedent of the relative clause), the third criterion is unambiguous: *sá* and *er* form a prosodic unit, with many examples such as 27 in which *er* appears in its clitic form *'s*. Following Harbert's (1992) analysis of the Gothic relative clitic *-ei*, I argue that *sá* is in the Spec-CP of the relative clause, with *er* in C (to be refined in §4 below).

In other instances of *sá*, the pronoun is not adjacent to *er* and is probably a (cataphoric) demonstrative. Sometimes, *sá* immediately precedes the relative clause, but a line break intervenes as in 28. If the metrical division is equivalent to a clause boundary, such examples are not relative pronouns. In other examples like 29, another word intervenes between *sá* and the relative clause, even more clearly ruling out the interpretation that it is a relative pronoun.

(28) í **ey** **þeiri** / **er** Algræn heitir
in island SÁ RP A. is.called
'in the/that island, which is called Algræn' (*Hárbarðsljóð* 17)

(29) a. hvé **sá hestr** heitir / **er** hverjan dregr
how SÁ horse is.called RP each drags
'what the/that horse is called, that each (day) drags … ' (*Vafþrúðnismál* 17)

b. Bíti-a þér **það sverð** / **er** þú bregðir
bite-not you SÁ sword RP you draw
'May the/that sword that you draw not bite for you' (*Helgak. Hund. II* 33)

Thus we see evidence in Eddic and skaldic poetry, some of which predates the earliest Icelandic prose, for both the original use of *sá* as a demonstrative, as in 28–29, and for the new use of *sá* as a relative pronoun, as in 27.

The numbers from the Sapp 2018 study of the poetic corpora and a comparison with the data from IcePaHC are shown in Table 13. (This excludes instances of pronouns other than *sá* and particles other than *er*.)

[20] Relative clauses in Eddic poetry were extracted from the *Greinir skáldskapar* (Karlsson et al. 2012). Those in skaldic poetry come from *The skaldic project* (Clunies Ross et al. 2012). See Sapp 2018 for details on how the relative clauses were identified and coded.

GENRE (DATE)	*er* only	*sá* nonadjacent to *er*	adjacent *sá* + *er* (same line in poetry)	TOTAL
Eddic poetry (900–1200?)	125 (36%)	72 (21%)	151 (43%)	*348*
9th c. skaldic	5 (31%)	1 (6%)	10 (62%)	*16*
10th c. skaldic	2 (9%)	5 (22%)	16 (70%)	*23*
11th c. skaldic	13 (14%)	7 (8%)	70 (78%)	*90*
12th c. skaldic	8 (10%)	3 (4%)	73 (87%)	*84*
13th c. skaldic	1 (7%)	2 (13%)	12 (80%)	*15*
14th c. skaldic (one poem)	4 (22%)	3 (17%)	11 (61%)	*18*
12th c. prose (1150)	89 (15%)	82 (14%)	431 (72%)	*602*
13th c. prose (1200–1275)	172 (23%)	209 (28%)	369 (49%)	*750*
14th c. prose (1300–1350)	231 (24%)	230 (24%)	506 (52%)	*967*
TOTAL	*650 (22%)*	*614 (21%)*	*1,649 (57%)*	*2,913*

TABLE 13. Position of *sá* vis-à-vis *er* in all three genres.

The data in Table 13 suggest that relative *sá* was already possible in early Eddic and skaldic poetry, and thus the reanalysis of *sá* took place before the emergence of Old Icelandic prose and increased in frequency from the ninth to the eleventh centuries. In the twelfth century, relative *sá* is at its most frequent in both skaldic poetry and in prose, although it is somewhat more frequent in verse than in prose (a difference that merits further investigation). Finally, in the thirteenth and fourteenth centuries, relative *sá* declines in both skaldic verse and in prose.

While the punctuation data from IcePaHC are inconclusive, punctuation in other ON manuscripts (Lindblad 1943) and metrical evidence from older poetry suggests that *sá* and *er* are closely associated phonologically and together serve to signal the beginning of a relative clause. If the metrical breaks and other poetic features such as the contraction of *sá* and *er* into *sá's* can be taken to give a clue to syntactic structure, this would mean that *sá* is in the relative clause—in other words, it is a case-attracting relative pronoun.

3.5. ARGUMENTS THAT *SÁ* IS NOT A RELATIVE PRONOUN. In this section, I discuss arguments by Wagener (2017), as well as one argument by a referee, that *sá* is not a relative pronoun.

Wagener (2017) investigates relative clauses in a corpus of five ON texts from the thirteenth century. This includes only one Old Icelandic text (*Laxdœla Saga*, which is not in IcePaHC) and four Old Norwegian texts of various genres. While Wagener cites Faarlund (2004:2) that there are 'no known syntactic differences' between Old Icelandic and Old Norwegian, it is unclear whether differences between Wagener's results and my own are due to the difference in the country of origin of the texts or to the smaller size of his corpus. Nevertheless, Wagener's study is particularly relevant to the current article, because (like my study but unlike earlier scholarship) he pays close attention to the semantics and distribution of *sá* in relative and nonrelative contexts. Wagener makes two findings that suggest a relative-like use of *sá*. First, in Wagener's corpus the majority (78%) of relative clauses occur with *sá* (Wagener 2017:63). Second, while he claims that *sá* in nonrelative contexts has 'unique reference' (see §2.1 above) and always precedes the N in his corpus, he finds that in relative contexts *sá* can have nonunique reference, in which case it tends to occur after the N (Wagener 2017: 124). Moreover, indefinite quantifiers and numerals with no head N cannot serve as antecedents of relative clauses unless *sá* is present, and in such cases *sá* does not have unique reference (Wagener 2017:114). These findings are consistent with the corpus data presented above and thus compatible with my contention that *sá* has a specialized function of introducing relative clauses, even serving as a relative pronoun in some in-

stances. Because these data suggest a nondemonstrative function of *sá*, Wagener devotes an entire chapter to argue against the hypothesis that *sá* can be a relative pronoun. I address each of Wagener's arguments in turn.

First, Wagener (2017:132) notes that purportedly relative *sá* can be inserted or omitted in all syntactic functions, meaning that the rules for deleting relative *sá* are arbitrary; he claims that this is a problem because the rule for deleting relative pronouns in English is nonarbitrary: namely, subject relative pronouns may not be deleted. There are two arguments against this assertion. First, there is one context in which *sá* cannot be deleted: recall Wagener's own finding mentioned above, that *sá* is obligatory when the antecedent contains an indefinite quantifier but no noun. Second, the deletion of Old Icelandic *sá* is fundamentally different from the deletion of English relative pronouns, because Old Icelandic relatives have double complementation. According to Rizzi 1990, deleting a relative marker in subject relative clauses leaves the empty subject position without a governor. But in Icelandic, deleting *sá* still leaves the relative complementizer *er*, which can govern the subject position. Indeed, the following example from Alemannic (like Bavarian, a German dialect that allows double complementation) shows that the pronoun can be deleted in subject relative clauses.

(30) dea Mo **(dea) wo** seine Schu verlora hot (Alemannic)
the man DER RP his shoes lost has
'the man who has lost his shoes' (Brandner & Bräuning 2013:132)

Wagener's second argument is that there appears to be complementary distribution of pre-N *sá* (which I argue is a demonstrative) and post-N *sá* (arguably a relative pronoun in some instances). There are no examples in Wagener's corpus nor in my own of strings like *sá N sá er*, which to Wagener (2017:133) suggests that there is only one kind of *sá* in ON. This is in contrast to closely related languages like Gothic, Old English, Old High German, and Modern German, which have demonstrative pronouns that are homophonous with relative pronouns, illustrated by the Old High German (OHG) example in 31.

(31) Ist this **ther** betalari, **ther** hiar saz blinter (OHG)
is this DER beggar DER here sat blind
'Is this the beggar who sat here blind?' (*Otfrid*, cited in Wagener 2017:133)

However, there is probably a semantic reason why the string *sá N sá* is ruled out in ON, while strings like *ther N ther* are possible in other Germanic languages. As Wagener notes, when demonstrative pronouns occur with relative clauses, 'the presence of a restrictive RC [relative clause] *neutralizes* the distinction between a demonstrative and a definite article, reducing the former to the latter' (2017:74–75). In fact, that is precisely what has happened in the OHG example above; while pre-N *ther* can be either a demonstrative or a definite article, only the article reading is possible in 31. Crucially, in the languages that Wagener mentions as allowing *ther N ther* ... strings, the demonstrative pronoun that is homophonous with the relative pronoun can also serve as a definite article (Harbert 2007:142). In ON, however, *sá* cannot serve as an article, because that function is occupied by *-inn/hinn*. The unavailability of *sá* to be 'reduced' to an article may explain why ON has the construction *hinn N sá*$_{\text{rel}}$ ... or *N-inn sá*$_{\text{rel}}$ ... (as in 25) but never *sá N sá*$_{\text{rel}}$.

Third, Wagener (2017:134) points out that unlike relative pronouns in other Germanic languages, *sá* nearly always agrees in case with its antecedent, except in the so-called learned style. Wagener dismisses the possibility outlined in §1 above that this

results from case attraction, because unlike in other case-attracting languages case attraction in ON is not subject to any morphosyntactic restrictions (only a stylistic one). The pervasive nature of Old Icelandic case attraction is an important point, which I account for in §4.

Fourth, Wagener (2017:136) points out instances in which post-N *sá* is modified by an adjective, a property unexpected if post-N *sá* is a relative pronoun.

(32) ek vilja spjót-it þat et gull-rekna er þú hefir í hendi
I want spear-the SÁ the gold-decorated RP you have in hand
'I want the golden spear that you have in your hands.'
(*Lax.*, cited in Wagener 2017:136)

Wagener correctly notes that modified *þat* in 32 cannot be a relative pronoun, but must be a demonstrative. However, this example does not pose a challenge to the relative-pronoun analysis of nonmodified instances of *sá*; recall from Table 7 above that there are seventy-one examples of post-N *sá* in non-relative-clause contexts. Thus the post-N position of *sá* is a necessary but not a sufficient criterion for identifying the relative-pronoun use of *sá*. Examples of post-N *sá* such as 32 are simply evidence that the older demonstrative function of *sá* continues alongside the newer relative use.

Wagener's final argument is based on the fact that in his corpus, when relative clauses are stacked, only the first relative clause contains *sá* (Wagener 2017:138).

(33) þa likiumc vér dyri **þvi er** á ut-löndum er **er** hætir lutolupus
then liken we animal SÁ RP in foreign-lands is RP is.called lutolupus
'then we are like the animal that is in foreign lands that is called lutolupus'
(Old Norwegian homily, cited in Wagener 2017:138)

Wagener cautiously concludes that the presence of *sá* before only the first stacked relative clause indicates that *sá* is part of the antecedent DP rather than the relative clause itself. In my corpus, however, there are indeed stacked relative clauses in which both clauses (as in 34) or only the second clause (as in 35) begin with *sá*.

(34) Var í þessu liði **ein blóðsjúk kona, sú er** hann segir eftir orðum
was in this crowd a hemorrhaging woman SÁ RP he says after words
Ambrósíusar Mörtu verið hafa, **sú er** blóðfallssótt píndi um sjö
Ambrose Marta been have SÁ RP hemorrhage suffered for seven
ár
years
'In this crowd there was a hemorrhaging woman, whom he says according to Ambrose to have been Martha, who suffered from hemorrhage for 7 years … ' (1350.MARTA.REL-SAG,.35)

(35) Kóngur-inn fékk ... **Þóri son Hákon-ar er** var erkibiskup fyrir Jón
king-the received Þórir son Hákon-GEN RP was archbishop before Jón
erkibiskup, **þann er** vel kunni kirkjunnar lög að heyra af sinni hendi
archbishop SÁ RP well could church law to hear of his hand
'The king received … Thorir son of Hakon, who was archbishop before Archbishop Jon, who was well able to hear church law on his behalf … '
(1325.ARNI.NAR-SAG,.287)

While it is possible to interpret the second *sá* as the head of a DP in apposition to the antecedent N, the occurrence of such clauses weakens Wagener's argument somewhat.

In addition to Wagener's objections, a referee points out that predicative adjectives in relative clauses appear in the nominative, even when *sá* is in a different case. Indeed,

there are thirteen instances of this in IcePaHC texts from the twelfth to fifteenth centuries, including the following one cited by the referee.

(36) að vér farim í dag á merkur og **skóga, þá er** oss eru
that we go today to forests and woods.ACC SÁ.ACC RP us are
nálægst-ir
closest-NOM
'that we go today to the forests and woods that are closest to us'
(1260.JOMSVIKINGAR.NAR-SAG,.698)

The fact that the adjective *nálægstir* agrees in gender and number with *skóga* and *þá*, but not in case, indicates that there is a null subject in the relative clause that is responsible for assigning nominative case to the adjective. This means that *þá* cannot be treated as the subject of the relative clause, which has raised into the relative pronoun position. If *þá* were indeed the subject of the relative clause, we would expect it to trigger accusative case on the predicate adjective, but there are no such examples in IcePaHC. This presents a serious challenge to my contention that *sá* can be a relative pronoun. In order to maintain the view that *sá* is a relative pronoun in examples like 36, I need a refined analysis of the derivation of relative pronouns in Old Icelandic, which is presented in §4.4 below.

In conclusion, many of Wagener's findings are compatible with the relative-pronoun analysis, while the strongest arguments against *sá* as a relative pronoun either can be explained independently or are based on empirically incorrect data, possibly due to the smaller corpus size. While Wagener comes to a different conclusion, I believe that these facts confirm my own findings above that demonstrative *sá* behaves semantically and distributionally differently from the *sá* that introduces relative clauses. Two challenges remain: the pervasive nature of Old Icelandic case attraction with *sá* and the fact that predicate adjectives are always nominative regardless of the case of *sá*. These two facts have to be accounted for by my analysis of *sá* in §4.4.

3.6. SUMMARY: THE STATUS OF *SÁ*. This section has argued that in Old Icelandic, *sá* sometimes functions as a relative pronoun. In §3.1, we saw that while the other demonstratives rarely precede relative clauses, the majority of instances of *sá* precede a relative clause; thus its most common function is to anticipate a relative clause (if a cataphoric demonstrative) or to stand in for the relativized argument (if a relative pronoun). This is confirmed by the semantic evidence presented in §3.2, which showed that when preceding a relative clause, *sá* can lack its usual semantics. Distributionally, §3.3 shows that *sá* can precede elements in the antecedent DP regardless of whether a relative clause is present (i.e. when it is a demonstrative), but its appearance after the antecedent N and other modifiers is limited to relative contexts, suggesting that post-N *sá* has the function of introducing relative clauses. Crucially, *sá* can extrapose with the relative clause and fails to trigger weak inflection on an adjective in the antecedent DP, so in at least some instances it is unambiguously in the relative clause. This is supported in §3.4 by evidence from punctuation and poetry: *sá* forms a prosodic unit with *er* at the beginning of the relative clause. Finally, while Wagener (2017) argues that *sá* is not a relative pronoun, I find that many of his findings are consistent with the relative-pronoun analysis, while other arguments can be dismissed or explained independently. Thus alongside its original function as a demonstrative (sometimes a cataphoric demonstrative anticipating a relative clause), *sá* has been reanalyzed in many instances as a relative pronoun. The biggest remaining obstacle to this analysis of *sá* as a relative pronoun are the case facts, which are taken up in the next section.

4. Case attraction in early icelandic. The traditional argument against *sá* as a relative pronoun has been the fact that it agrees with its antecedent in case; however, this can be viewed as case attraction, a widespread phenomenon in the older Germanic languages. Section 4.1 discusses case attraction in some other Germanic languages, and §4.2 compares this to the situation in medieval and early-modern Icelandic. Four syntactic analyses of case attraction are reviewed in §4.3. I then present my own analysis utilizing a split CP and the notion of phases (§4.4) and argue that case attraction represents an intermediate stage in the development of relative pronouns out of demonstrative pronouns (§4.5).

4.1. Other germanic languages. Case attraction occurs to differing degrees in many of the older Germanic languages. In Gothic, for example, Harbert (1989, 1992) finds that case attraction occurs only in free relatives, and headed relatives consistently fail to show case attraction even when the Greek model has it. In the Gothic free relative construction, the relative pronoun can occur either in the case of the matrix-clause argument or in the case of the relativized argument, subject to the obliqueness hierarchy (genitive > dative > accusative > nominative): of the two potential cases, the pronoun will appear in the more oblique one (Harbert 1989:146). In 37, the relative pronoun represents the subject of the relative clause, but the case required by the matrix verb 'read' is accusative, and thus the pronoun appears in the accusative. In 38, the relative pronoun represents the direct object of the relative clause, so despite the fact that the relative clause functions as the subject of the matrix clause, the pronoun appears in the accusative here too.

(37) a. [**þo-ei** ist us Laudeikaion] jus ussiggwaid (Gothic)
SA.ACC-RP [e].NOM is from Laodicea you read
'And read (the one) that is from Laodicea'
(Col. 4:16, cited in Harbert 1992:111)

b. [**þan-ei** frijo-s] siuks ist
SA.ACC-RP love-2SG [e].ACC sick is
'(The one) whom you love is sick' (John 11:3, cited in Harbert 1989:111)

OHG and Middle High German (MHG) have case attraction in free relatives as in Gothic, but also in headed relatives (Pittner 1995:198). As in Gothic, case attraction in OHG and MHG is subject to the obliqueness hierarchy; note, however, that in MHG only the genitive case can override another case (Harbert 1992:112). In both 38 and 39, the relative pronoun is in the genitive because the matrix antecedent is genitive, even though in both cases the pronoun represents the subject of the relative clause.

(38) annuzi **min-es fater** [**thes** **dar** in himile ist] (OHG)
face my-GEN father.GEN DER.GEN [e].NOM RP in heaven is
'The face of my father who is in heaven' (*Tatian* 96:1, cited in Harbert 1992:110)

(39) ere … **des dienst-es** [**des** iu wirt getan] (MHG)
honor the service-GEN DER.GEN you.DAT is [e].NOM done
' … the honor of the service, that is done to you'
(*Karl der Gr.* 9666, Harbert 1992:110)

Turning to Old English (OE), Mitchell (1985:88) notes that the pronoun *se* is frequently ambiguous between demonstrative and relative and reviews scholarship that argues for each interpretation. Mitchell cites instances of *se* both as an unambiguous demonstrative (1985:93) and as an unambiguous relative (1985:95–96). Harbert (2007) pays most attention to *se* in free relatives; unlike in Gothic, in OE free relatives *se* always bears the case assigned by the matrix clause (Harbert 2007:467).

(40) befæste hē ðā lāre **þǣm** [**þe** his wordum ne gelīefan] (OE)
confirm he the teaching SE.DAT RP [e].NOM his words not believed
'Let him confirm his teaching to those that didn't believe his words'
(*CP* 25,2, cited in Harbert 2007:467)

Harbert concludes from this that OE *se* in free relatives is a demonstrative, not a Gothic-type relative pronoun with case attraction. In headed relatives, by contrast, Ringe and Taylor (2014:467–68) identify *se* as the relative pronoun, and claim that the case of the pronoun most frequently reflects the relativized function, as in 41. However, they also note that case attraction occurs (2014:470). In 42, the second *þone* must be a relative pronoun, because the matrix antecedent is already determined by the first *þone*; although it is the subject of the relative clause, it agrees with the accusative antecedent.

(41) … is **an byrnende munt,** [**þone** menn hatað Ethna] (OE)
is a burning mountain.NOM SE.ACC men call [e].ACC Etna
'(In Sicily) is a burning mountain which men call Etna'
(*Ælfric's lives of saints* 217.2152, cited in Ringe & Taylor 2014:468)

(42) … ge seceað **þone hælynd** [**þone þe** on rode ahangen wæs]
you seek the savior.ACC SE.ACC RP [e].NOM on cross hung was
' … you seek the savior who hung on the cross' (OE)
(*Mt (WSCp)* 28.5.2139, cited in Ringe & Taylor 2014:471)

There is some evidence for case attraction in Old Saxon (OS). According to Buzzoni (2016:63), it occurs mainly in the C manuscript of the *Heliand*.[21] Thus one can find examples in the *Heliand* both with and without case attraction, but it is not clear exactly what conditions favor and disfavor attraction. Clearly, a study of the complete *Heliand* that takes manuscript variation into account is needed. Nevertheless, a few stray examples combed from the literature will illustrate the possibilities in OS. Case attraction is possible in both free relatives (43a) and headed relatives (43b).

(43) a. … bôtta [**thêm thâr** blinde wârun] (OS)
healed THE.DAT RP [e].NOM blind were
'(So he …) healed those who were blind'
(*Heliand* 2357, cited in Wilhelmy 1881:10)

b. that barn **god-es**, [**thes** sie ni mahtun … farstandan]
that child God-GEN THE.GEN they not could [e].ACC … understand
'that Son of God, whom they could not understand (in their hearts)'
(*Heliand* 2371, cited in Wilhelmy 1881:10)

However, there are also examples where case attraction does not take place. The lack of case attraction in 44a could be explained by the case hierarchy: the case required by the relative clause is dative and thus overrides the nominative case of the antecedent. But no such explanation is possible for 44b, because the nominative case should be overridden by the genitive case of the antecedent.

(44) a. **brûdi Iudeo-no**, [**them** gio barn ni uuarð ôdan …]
women.NOM Jews-GEN the.DAT ever child not was [e].DAT bestowed
'Jewish women, to whom a child was never bestowed' (OS)
(*Heliand* 5525, cited in Klinghardt 1884:24)

[21] Despite Buzzoni's claim, the Taeger (1984) edition of *Heliand* does not indicate any differences in the case of the relative pronouns in 43a–b between manuscripts C and M. Note also that 44a does not show case attraction even though it is from C.

b. he beginna **thero** girnean, [**thiu** imu gegangen ni scal].
he begin her.GEN desire the.NOM [e].NOM him belong not shall
'that he begin to desire the one who shall not belong to him'
(*Heliand* 1481, cited in Roehrs 2000:4)

Thus based on these examples from the literature, OS does not seem to have consistent case attraction, but further study is needed.

4.2. Case attraction in old icelandic and beyond. The situation in Old Icelandic shows some similarities to and differences from case attraction in the other older Germanic languages. Case attraction in Old Icelandic occurs with all kinds of relative clauses, not just free relatives. Unlike most of the Germanic demonstrative/relative pronouns, Old Icelandic *sá* is nearly always in the case of the antecedent. The exceptions to case attraction are argued by Nygaard (1905) to be related to register, occurring in the Latinate 'learned style' as in 45, where *þeim* appears in the dative case required by the preposition *af* rather than the genitive case of the antecedent.[22] Nygaard (1905:262) notes that this very rarely occurs in the popular style, as in 46, where *þeir* appears in the nominative despite its accusative antecedent *dverga*.[23]

(45) fjórir eru hættir **hugrenning-ar, af þeim er** við kœm-sk hugr
four are dangers thought-GEN by SÁ.DAT RP against comes-PASS mind
'There are four dangers of thought, with which the mind is confronted … '
(*Hom*. 18, 2, cited in Nygaard 1905:264)

(46) Mál er **dverga** / … telja, / **þeir er** sótto / frá salar steini …
tale is dwarves.ACC list SÁ.NOM RP sought from hall.GEN stone
'The tale will list the dwarves … who from the hall's stone sought [thrones]' (*Völuspá* 14, cited in Nygaard 1905:262)

Turning to my results from IcePaHC, in the whole corpus there are only thirty-four examples of a non-case-matching *sá* and N.[24] Of these, just six occur in the Old Icelandic period, all from the learned-style *Hómilíubók*.

(47) … friðsamt ríki **son-ar Guðs lifanda, sá er** frið gerði …
peaceful kingdom son-GEN God's living SÁ.NOM RP peace made
' … the peaceful kingdom of God's living son, who made peace … '
(1150.HOMILIUBOK.REL-SER,.996)

This would appear to confirm Nygaard's claim that nonattracting *sá* is limited to the learned style. However, Wagener (2017:128) points out that this type of relative clause should be considered marginal, an effect of translation rather than a genuine feature of ON grammar. Indeed, nonattracting *sá* is marginal even within the Old Icelandic *Hómilíubók*, occurring in just six out of nearly 500 relative clauses.

The remaining twenty-eight examples of nonattracting *sá* in IcePaHC are from the sixteenth to eighteenth centuries. The eleven examples from the sixteenth century are all from religious texts (mostly in translations of the New Testament). This could arguably be a continuation of the Old Icelandic learned style, which Wagener (2017)

[22] Nygaard (1905) cites the *Old Norwegian homily book*. Neither this example nor any of his other examples of nonattracting *sá* are found in IcePaHC (which draws instead on the *Old Icelandic homily book*).

[23] This example and the two others that Nygaard gives are from Eddic poetry.

[24] The query (NP* idoms D*) AND (NP* idoms N*) AND (NP* idoms CP-REL*) does not yield any instances of case conflict between antecedent N and *sá*, because the IcePaHC taggers would have put non-case-matching D and N in separate NPs. Therefore, I searched for examples where *sá* and the relative clause were coded in a separate NP from the antecedent (coded as appositions, i.e. (NP-PRN idoms CP-REL) and read through the results to identify the nonattracting examples. I did not look at texts from the twentieth or twenty-first centuries, because Modern Icelandic *sá* is no longer a relative pronoun.

claims is a translation phenomenon. Thráinsson (1980:69–70), finding similar examples in sixteenth-century Bible translations, maintains that these represent a genuine change in Icelandic grammar toward nonattracting relative pronouns. In the following example, the relative pronoun is in the dative, required by the verb 'ride' in the relative clause. Interestingly, the example lacks *er*.

(48) Er eg ecke **þijn Asna, þeirre** þu hefur riðeð
am I not your donkey.NOM SÁ.DAT you have ridden [e].DAT
'Am I not your donkey, whom you have ridden?'
(Numbers 22:30, cited in Thráinsson 1980:70)

Therefore, one cannot rule out that nonattracting relative pronouns in sixteenth-century Icelandic, as in Old Icelandic, are a product of translation. This view is bolstered by the fact that these eleven unambiguous instances of nonattracting *sá* occur alongside nearly 800 instances of *sá* that are case-attracting or ambiguous (e.g. when the matrix and relative cases are the same).

However, one does begin to find unequivocal evidence for nonattracting relative pronouns in the seventeenth century. There are sixteen unambiguous examples from this century in my database, and all of them are from biographical or fictional works without a foreign-language model (*Olafur Egilsson*, *Indíafari*, and *Ármann*).[25]

(49) Einn … átti sér **unga og dægilega kvinn-u, sú er** Anna
one had REFL young and pretty wife-ACC SÁ.NOM RP Anna
hét.
was.called
'One (tailor …) had a young and pretty wife, who was called Anna.'
(1661.INDIAFARI.BIO-TRA,36.280)

These sixteen clear instances of nonattracting *sá* are also far outnumbered by case-attracting and ambiguous examples, which total over 700. Thus it seems that after the Old Icelandic period, non-case-attracting relative *sá* developed even in non-Latinate texts, although it continued to be used alongside case attraction. Interestingly, this is also the period when relative *hverr* 'who', which is also nonattracting, is at its peak use (recall Fig. 1).

In Old Icelandic, case attraction with *sá* does not obey a case hierarchy, as can be seen in examples like the following, where an oblique case required by the relative clause is overridden by nominative case from the matrix clause. In 50a, the relativized argument is the direct object of 'made', but *sá* is nominative due to case attraction to its antecedent *dagur*. In 50b, the relativized argument is the possessor (presumably genitive, but tagged in IcePaHC as an indirect object), but *sá* is nominative because of the antecedent *Guð*.

(50) a. Sjá er **dag-ur sá, er** Drott-inn gerði.
this is day-NOM SÁ.NOM RP Lord-the made [e].ACC
'This is the day that the Lord made.' (1150.HOMILIUBOK.REL-SER,.574)

b. Guð feðra vorra, **sá er** þú boðaðir
God.NOM fathers our SÁ.NOM RP you.NOM proclaimed
kraft
[$_{DP}$ strength [e].GEN]
'God of our fathers, whose strength you proclaimed ... '
(1450.JUDIT.REL-BIB,.157)

[25] In addition, there is one nonattracting *sá* from the eighteenth-century text KLIM, a translation of Ludvig Holberg's Latin novel *Niels Klim's underground travels.*

In this brief survey, we have seen that one Germanic language has case attraction only in free relatives (Gothic), while the others, including Old Icelandic, have case attraction even after an overt antecedent. We have also seen that some languages obey a case hierarchy when the cases conflict (Gothic, OHG, and MHG), while the picture in OE and OS is less clear. Old Icelandic *sá*, however, is not subject to a case hierarchy, but consistently shows case attraction, a situation most similar to OE free relatives (but not limited to free relatives in Old Icelandic). Nonattracting *sá* is mostly limited to translated texts in the older period but appears in various genres by seventeenth-century Icelandic. This is summarized in Table 14.

	RELATIVE CLAUSE TYPES	ATTRACTION TYPE
Gothic	free relatives only	consistent case hierarchy
Old High German	free and headed relatives	consistent case hierarchy
Mid. High German	free and headed relatives	only genitive overrides other cases
Old English	free relatives	consistently shows matrix case
	headed relatives	case attraction only occasionally
Old Saxon	free and headed relatives	in manuscript C, unclear how consistent
Old Icelandic	free and headed relatives	consistently shows matrix case in popular style

TABLE 14. Case attraction in the older Germanic languages.

4.3. PREVIOUS ANALYSES OF CASE ATTRACTION. In §3, I argued that in many instances *sá* is a relative pronoun. In §4.2, I showed that unlike in other Germanic languages, Old Icelandic case attraction with *sá* is pervasive—not limited to free relatives and not subject to a case hierarchy. In examples where *sá* is clearly in the matrix clause because it does not immediately precede the relative particle—15, 18, 19, 21, and 29 above—the case of *sá* is obviously under agreement with the antecedent N. However, another mechanism for case assignment is called for in examples where *sá* is more likely in the relative clause; this is especially clear when *sá* is nonadjacent to the antecedent N, as in 14a, 20, and 27.

If I am correct that these latter examples involve *sá* as a relative pronoun, case assignment in such examples becomes mysterious. Under the conventional generative analysis of relative pronouns (e.g. Carnie 2013:370), a relative pronoun originates in the relative clause in the position of the argument it represents and raises by WH-movement to Spec-CP. Therefore, it should be in the case of its trace in the relative clause. In case-attraction languages, however, the relative pronoun agrees with the antecedent instead. I discuss four approaches to case attraction in the generative framework—Harbert 1992, Åfarli 1995, Bianchi 2000, and Roehrs 2000—before discussing my own analysis in §4.4.

Harbert (1992) considers case attraction in Gothic to be a special instance of EXCEPTIONAL CASE MARKING—case assignment across a clause boundary (in this case CP). He argues that in Gothic free relatives, the pronoun is in the Spec-CP of the relative clause, because the relativizing suffix *-ei* (in C) cliticizes to the pronoun (1992:115). Harbert claims that the case assigner in the matrix clause can assign case down into the Spec-CP of the embedded relative clause. This raises the question of why some languages allow case attraction but others do not. Harbert, working within the BARRIERS framework, argues that NP is usually a barrier to external government, ruling out case attraction in most languages. Case attraction, then, is possible only in languages like Gothic whose 'NPs are transparent to government' (Harbert 1992:126); that Gothic DPs are transparent to external government can be seen in examples like the following, where a possessor is extracted from a DP.[26]

[26] I have not found any examples of extraction from DP in IcePaHC.

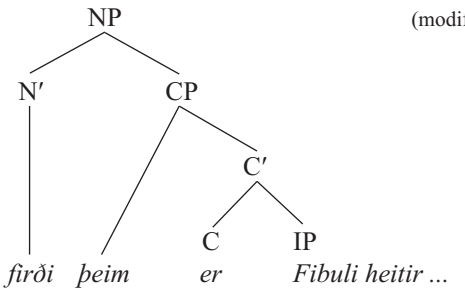
(51) **Iesus** … [**þiz**$_i$ **-ei** weis kunþedum [attan jah aiþein [t_i]]] (Gothic)
Jesus SA.GEN-RP we knew father and mother
'Jesus, whose father and mother we knew' (John 6:42, cited in Harbert 1992:125)

Harbert's account has one important implication for Old Icelandic: like *-ei* in Gothic, Old Icelandic *er* cliticizes to *sá* (see the poetic evidence in §3.4 above). Therefore, relative *sá* is likely in Spec-CP of the relative clause (to be refined below). If Harbert's idea is correct, *sá* in such cases cannot be a cataphoric (correlative) pronoun, because it would be in the matrix clause and cliticization should not take place across the clause boundary. While I accept Harbert's basic assumptions that the case-attracting relative is in the highest Spec of the relative clause but is assigned case from across the clause boundary, the differences between attraction in Gothic (limited to free relatives and subject to the case hierarchy) and Old Icelandic (pervasive case attraction), as well as his outmoded theoretical framework, make Harbert's analysis less appealing for Old Icelandic.

Åfarli (1995) proposes a very different account in an attempt to capture both case-attracting relatives (in the popular style) and nonattracting relatives (in the learned style) in ON. He claims (1995:538) that a learned-style relative clause is either a complement or adjunct of the antecedent N (the exact position of relative clauses being a matter of some debate in the generative literature), but in any event this structural relationship does not result in agreement. In the popular style, however, Åfarli claims that the relative clause is attached in the specifier position of the antecedent noun, so that the relative pronoun can receive case from the antecedent noun through Spec-head agreement. In the example below, the relative pronoun *þeim* in CP receives dative case through Spec-head agreement with *firði*, as the CP is in Spec-NP (Åfarli 1995:541).

(52) a. hann bió í **firði þeim er** Fibuli heitir á Norðmœri
he lived in fjord SÁ RP Fibule is.called in Nordmøre
'he lived in the fjord that is called Fibule in Nordmøre'
(*Gisla Saga*, cited in Åfarli 1995:541)

b. (modified slightly from Åfarli 1995:541)



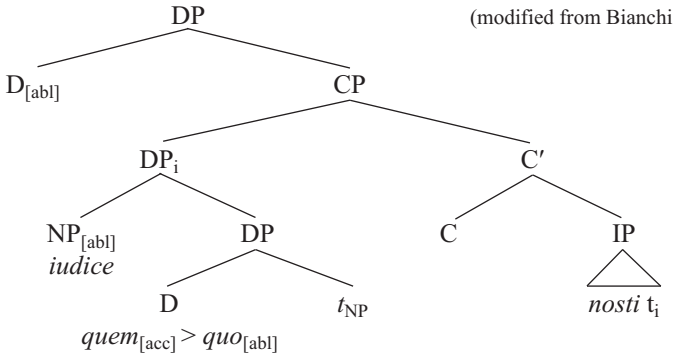
There are a number of problems with Åfarli's account. First, the Spec-head agreement illustrated in 52 is spurious, as the pronoun in question is not the specifier of NP; rather, the relative clause is the specifier of NP, and *sá* is the specifier of the relative clause. Second, Old Icelandic does not otherwise have specifiers on the right (and according to Kayne (1994), specifiers are universally on the left). Third, the claim that some relative clauses in a language are in specifier positions while others are complements or adjuncts is not well motivated, being simply an ad hoc mechanism to account for the case difference. As Wagener (2017) points out, learned-style relative clauses are a translation phenomenon in ON and thus need no separate structural account.

More recently, Bianchi (2000) has proposed an analysis of case attraction that is based on Kayne's (1994) approach to relative clauses. In this approach, the relative clause is not a modifier/adjunct of the antecedent N. Rather, the relative clause is a CP complement of the matrix D. As the complement of the matrix D is a CP, there is no an-

tecedent N in the matrix DP; instead, what is traditionally called the antecedent noun is actually part of the relative clause (Bianchi 2000:61). This noun and the relative pronoun together raise to the Spec-CP of the relative clause; then the antecedent noun raises to the Spec of the relative pronoun (Bianchi 2000:61).

(53) a. notant-e **iudic-e** **quo** nosti (Latin)
judging-ABL judge-ABL who.ABL know.2SG
'judging the judge whom you know' (Horace, cited in Bianchi 2000:58)

b. (modified from Bianchi 2000:68–69)



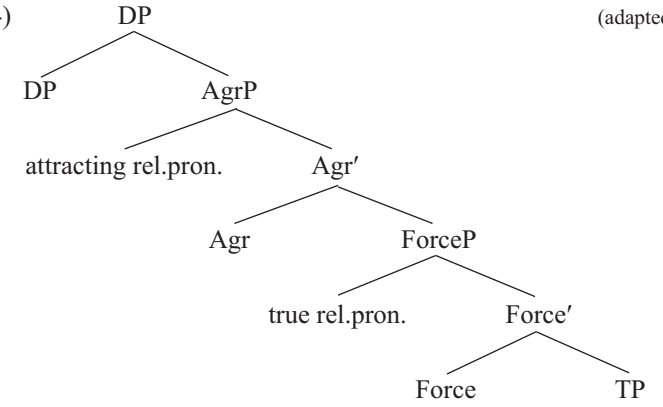
In this analysis, both the antecedent noun and the relative pronoun are governed by the matrix D and can thus be assigned the case of the matrix DP (Bianchi 2000:68). Under this view, then, the case not only of the relative pronoun but also of the 'antecedent' is subject to case attraction.

This is a theoretically interesting explanation for the case-attraction phenomenon, but only if one assumes Kayne's unconventional structure of relative clauses. Wagener (2017), while not arguing specifically against Bianchi, argues that Kayne's (1994) complement-of-D analysis for relative clauses is undesirable for four reasons. First, because relative clauses are not obligatory, they are probably adjuncts, not complements (Wagener 2017:51). Second, relative clauses are semantically equivalent to adjectives and should receive a similar analysis (Wagener 2017:52). Third, the antecedent N agrees in case with the matrix D, which is straightforward if NP is the complement of D but not if NP raises from within the relative clause (Wagener 2017:52). Finally, Wagener argues that an antecedent N raised from within the relative clause should not be able to select the appropriate matrix determiner, but it clearly can: *the sugar I bought* vs. **a sugar I bought* (Wagener 2017:53). With Wagener's objections in mind, I believe that a Kaynean analysis of case attraction raises more questions than it answers.

A far simpler approach to case attraction is that by Roehrs (2000), which only requires the assumption of a split-CP system (Rizzi 1997). Roehrs proposes that case-attracting relative pronouns and nonattracting relative pronouns are located in different projections within the CP domain of the clause. Nonattracting pronouns are arguments of the relative clause and are thus in the canonical position for relative pronouns, which both Rizzi and Roehrs identify as Spec-ForceP. Roehrs argues that case-attracting pronouns, although part of the relative clause, are simply connecting elements that do not have a theta role and are thus generated in a higher Spec position. Roehrs connects this structurally higher position to case attraction by employing Rizzi's idea of AgrP. While Rizzi himself does not propose an AgrP on top of ForceP, Rizzi (1997:321) states that if any head has substantial agreement features, 'an independent Agr projection can crop up on top of it'.[27]

[27] A referee points out that much recent work within minimalism no longer assumes AgrP for reasons detailed by Chomsky (1995:349ff.). However, AgrP continues to be used for agreement within the DP in studies

(54) (adapted from Roehrs 2000)



The distinction between ForceP and AgrP relates to the case of the relative pronouns in the following way. Beginning with true, nonattracting pronouns, Roehrs argues that these are generated in the position of the relativized argument (in the embedded clause) and raise to Spec-ForceP. Assuming that relative clauses are adjoined to the antecedent DP, they are within the case-checking domain of the antecedent; however, Roehrs assumes that ForceP is a barrier to government, thus blocking agreement between the antecedent and the relative pronoun in Spec-ForceP. As a result, true relative pronouns in ForceP show the case of their argument position within the relative clause. Case-attracting relative pronouns, by contrast, have agreement features that cannot be attributed to the case of the relativized position in the embedded clause (namely agreement in case with the antecedent), and it is these agreement features that necessitate AgrP atop ForceP. Being outside ForceP, there is no barrier to government by the antecedent DP, and thus relative pronouns in AgrP agree in case with the antecedent. Although Roehrs (2000) employs notions such as government and barriers that are no longer commonly assumed in syntactic theory, his main claim—that case attraction results from a higher structural position associated with agreement features—is the basis for my own analysis below.

4.4. A SPLIT-CP, PHASE-BASED ACCOUNT. Turning finally to my analysis, I build on Roehrs's (2000) distinction between ForceP and AgrP, with two differences. One difference is that I divide the splitting of CP into two stages: at first, case attraction in Old Icelandic necessitates the projection of AgrP atop ForceP, but relative *sá* can only be inserted into Spec-AgrP. Later, relative *sá* may appear in either Spec-AgrP or Spec-ForceP, resulting in competition between case attraction and nonattraction. The second difference is that I update the analysis of case assignment to Spec-AgrP vs. Spec-ForceP using Chomsky's (2001) notion of phases.

Beginning with Old Icelandic, let us first recap the arguments from §3 for demonstrative vs. relative *sá*. Many of the semantic and word-order data are compatible with either a cataphoric-demonstrative (correlative) analysis for *sá* or a relative-pronoun analysis, but there are a few strong arguments for each view. The first argument on the demonstrative side is that case attraction is nearly universal in Old Icelandic, with the exception of the so-called learned style (which Wagener 2017 dismisses as a product of translation). Second, *sá* fails to trigger agreement in case with predicate adjectives (see

such as Cinque 2010. AgrP (and similarly InflP) are especially useful for explaining diachronic changes to syntax that have a morphological effect: besides the current study, this idea is employed by Roehrs (2013) to explain the addition of pronominal morphology to German determiners and by Roehrs and Sapp (2016:281–82) to explain the addition of adjectival inflection to certain quantifiers in German.

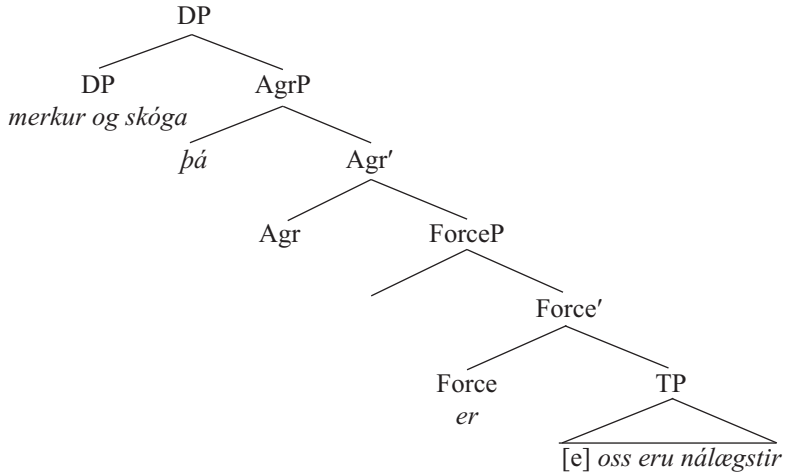
36 above), ruling out the possibility that *sá* raises from the argument position into the CP layer. If *sá* is a cataphoric demonstrative, it would be in the same DP as the antecedent N. Alternatively, a referee suggests that cataphoric *sá* could be the head of its own DP in apposition to the DP containing N, which would leave *sá* rather than N as the antecedent of the relative clause.[28]

While a demonstrative-pronoun analysis can account for many instances of the *sá* that precedes relative clauses, this analysis is not sufficient to account for all of the data. There is clear evidence that *sá* is a relative pronoun in some cases. First, *sá* can extrapose with the relative clause as in 14a and 20, indicating that it forms a constituent with the relative clause; at least in examples 14a and 20 that constituent appears to be the relative CP. Second, post-N *sá* fails to trigger weak inflection on an adjective in the antecedent DP, as in 22, suggesting that *sá* is not in the antecedent DP. Third, as shown in §3.4, *sá* forms a prosodic unit with *er* at the beginning of the relative clause and can even host cliticized *er*.

These facts, taken together, indicate that although *sá* does not raise from the position of the relativized argument inside the relative clause, it is nevertheless inside the relative clause in many instances. I therefore adopt the analysis by Roehrs (2000), in which case-attracting relative pronouns are inserted into the highest specifier of the CP layer. This can be illustrated with 36, repeated here as 55.

(55) a. merkur og skóga, þá **er** oss eru **nálægst-ir** [= 36]
forests and woods.ACC SÁ.ACC RP [e].NOM us are closest-NOM
‘ … forests and woods that are closest to us’

b.



In this example, the case-attracting pronoun *sá* is inserted into Spec-AgrP. The subject position of the embedded clause is occupied by a null pronoun, with which the predicate adjective agrees in case. (I remain agnostic as to the exact location of the relative particle *er* and to the possibility that the null pronoun WH-moves to Spec-ForceP.) As in

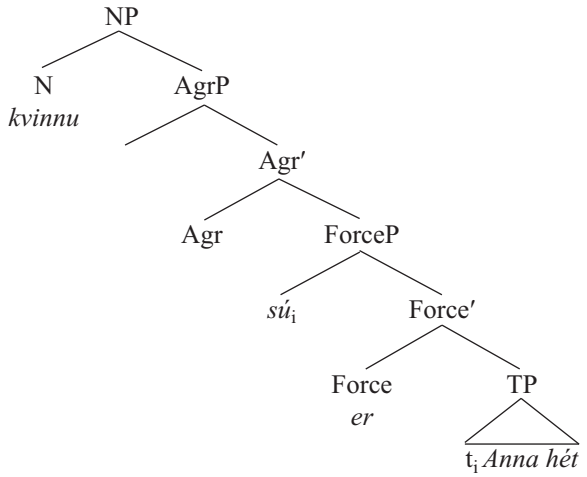
[28] The referee speculates that the apposition analysis is particularly suited for nonrestrictive relative clauses. This would make the prediction that restrictive relative clauses would begin with *er* alone, while nonrestrictive relative clauses would have *sá er.* However, this prediction is not borne out. There are many restrictive relative clauses with *sá*; for example, in 3 the relative clause explains the function of the earls, and in 4 the relative clause disambiguates Herod the Great from other kings by that name. Conversely, there are nonrestrictive clauses without a demonstrative, such as 7. The apposition analysis is problematic for another reason: the majority of Old Icelandic relative clauses begin with *sá*, but it seems very unlikely that the majority of Old Icelandic relative clauses are in appositive DPs.

Roehrs 2000, I maintain that the case agreement between relative *sá* and the antecedent N necessitate the projection of AgrP above ForceP. However, pace Roehrs 2000, there is little evidence in Old Icelandic for true, nonattracting pronouns; thus at this stage, relative *sá* only occurs in the case-attracting position Spec-AgrP.

By the seventeenth century, we have genuine competition between case-attracting and nonattracting *sá,* which can be captured in the split-CP analysis as Roehrs (2000) proposed: case-attracting *sá* continues to occur in the higher projection Spec-AgrP, while true relative *sá* moves to Spec-ForceP.

(56) a. … **unga og dægilega kvinn-u, sú** **er** Anna hét. [= 49]
young and pretty wife-ACC SÁ.NOM RP Anna was.called
'One tailor … had a young and pretty wife, who was called Anna.'

b.



Interestingly, in these two centuries there is only one example of a predicate adjective in the nominative 'disagreeing' in case with nonnominative *sá*. Aside from this exception, the fact that predicate adjectives now always agree with relative *sá* hints that both attracting and nonattracting *sá* may be raising from the relativized argument position into the CP layer.

Turning now to my analysis of the case distinction between case-attracting relative pronouns in Spec-AgrP and true relative pronouns in Spec-ForceP, I capture this using phase theory. Phase theory accounts for why certain operations are limited to particular parts of the syntactic derivation. Chomsky 2001 proposes two phases: *v*P (the domain of the verb and its arguments) and CP (the clause). Derivation takes place within the phase, and then all material except the phase edge is spelled out to phonological form (PF). Thus the phase domain, once spelled out, is no longer accessible to syntactic operations; Chomsky calls this the PHASE IMPENETRABILITY CONDITION. The phase impenetrability condition allows us to update Harbert's (1992:115) argument concerning cliticization of relative particles and the position of the relative pronoun (*sá-s* in ON, *þiz-ei* in Gothic): cliticization indicates that the pronoun and the particle are in the same phase, so with the particle in C, the pronoun must be in Spec-CP.[29] Because this cliticization occurs with both case-attracting and nonattracting pronouns, even case-attracting pronouns must be within the phase (i.e. CP) of the relative clause. But under a split-CP analysis, exactly which projection of the CP layer is the phase boundary? Totsuka (2013) argues that Force is the highest head of the CP domain and is thus the phase head. However, Bošković

[29] I thank a referee for suggesting this line of inquiry.

(2014) claims that phases can vary, depending on how many functional projections are present; he calls this 'the-highest-phrase-is-a-phase approach'. If, as I have argued, AgrP is the highest projection of the relative clause in Old Icelandic and into early-modern Icelandic, I propose that Agr rather than Force is the phase head at these stages of the language. This would make Spec-AgrP a phase edge, and thus pronouns inserted in Spec-AgrP are accessible to an agreement relation with the antecedent to which they are adjoined. Pronouns that move into Spec-ForceP, by contrast, are not at the phase edge and thus not accessible to operations outside the relative clause; they therefore maintain the case of the argument position in which they are generated.

This analysis provides an account for the synchronic variation between attracting and nonattracting relative pronouns: relative pronouns in Spec-AgrP are in the phase edge and thus undergo case attraction, while pronouns in Spec-ForceP are not at the phase edge and are thus impervious to case attraction. However, the following question remains: Why do Old Icelandic relative pronouns have the agreement features that necessitate projecting AgrP in the first place? In the next section, I argue that this state of affairs is a consequence of the reanalysis of demonstrative pronouns to relative pronouns.

4.5. Reanalysis from demonstrative to relative *sá*. The intuition that case attraction is a consequence of the way relative pronouns developed from demonstratives can be found as early as Erdmann 1874:53. Within the generative framework, Pittner (1995) sketches the development as follows, where 'NP' represents the antecedent and '*pro*' a null relative pronoun.

(57) a. NP_i [pro_i … (adapted from Pittner 1995:220)
b. NP_i correlative $pronoun_i$ [pro_i …
c. NP_i [(cor)relative $pronoun_i$ …
d. NP_i [relative $pronoun_i$ …

In 57b the 'correlative pronoun' (what I describe as a cataphoric demonstrative) is in the matrix clause and as such shares the case of the matrix NP. In 57c the pronoun has been reanalyzed as part of the relative clause but still agrees in case with the antecedent: I have labeled this a case-attracting relative pronoun (Pittner calls it a '(cor)relative' as it behaves syntactically like a relative but morphologically like a correlative). In the final stage of the development (57d), the pronoun is both morphologically and syntactically a true relative pronoun. While my terminology differs somewhat from Pittner's, this is the basic insight I adopt.

Turning now to Old Icelandic, the main development is from demonstrative *sá* to (case-attracting) relative *sá*. In the learned style and in texts after the Old Icelandic period, there is evidence for a further development of *sá* to a nonattracting relative pronoun. My analysis for each stage is illustrated in 58, which updates the structures in 5 using the split-CP analysis argued for here.

(58) a. demonstrative: {*sá*} NP_i {*sá*} [$_{CP}$ pro_i [$_C$ *er/sem* … e_i
b. case-attracting relative: NP_i [$_{AgrP}$ $sá_i$ [$_{ForceP}$ *er/sem* … e_i
c. nonattracting/true relative: NP_i [$_{ForceP}$ $sá_i$ *er/sem* … t_i

The demonstrative represented in 58a can have either the original deictic function or the cataphoric (correlative) function, in which *sá* merely anticipates a following relative clause (keeping in mind that demonstrative *sá* remains a possibility at all times, into Modern Icelandic). Note that demonstrative *sá* can precede or follow the antecedent noun, and that the deictic and cataphoric uses of *sá* cannot be distinguished by word order alone. The cataphoric use of *sá* originated well before the emergence of Old Icelandic prose, being found in runic inscriptions from the Common Norse period. In the follow-

ing inscription, I assume that Ketiley had only one husband by that name (which happens to be missing from the inscription), so *sá* must not have any extralinguistic deixis.

(59) … **þiakn al kuþ-an þan is** hana ati
man all good-ACC SÁ.ACC RP [e].NOM her.ACC had
'Ketiley made this monument for … a very good man, who was her husband' (Stora Herrestad, DR 293, ca. 1000–1050, in *Rundata 3.0*)

Before the earliest Old Icelandic prose appears, reanalysis takes place: postnominal cataphoric *sá* in 58a is reanalyzed as a case-attracting relative, 58b. This reanalysis was facilitated by the semantic ambiguity between cataphoric demonstratives and relative pronouns and by the high frequency of post-N *sá*, often putting it in a position immediately preceding the relative clause. So the reanalysis of the post-N cataphoric demonstrative *sá* to case-attracting relative *sá* involves a reanalysis of the clause boundary.

(60) (cataphoric) demonstrative pron. → relative pronoun
hljóð **þau** [$_{CP}$ er eigi finna-st → hljóð [$_{AgrP}$ **þau** [$_{ForceP}$ er eigi finnast
sounds SÁ RP not find-PASS [= 14b]
'(every language has) sounds that are not found (in other languages)'

As in Gothic (Harbert 1992), the fact that Old Icelandic *er* cliticizes to *sá* in poetry indicates that the pronoun is in the relative clause. Following Harbert's analysis of Gothic, let us assume that *sá* is in the highest Spec position of the relative clause. However, we now have a mismatch between morphology and syntax: syntactically, *sá* is in the relative clause, but morphologically, it continues to agree in case with the antecedent. This case agreement with the antecedent cannot be attributed to the pronoun's function in the relative clause; thus as argued above this agreement feature causes *sá* to project AgrP above ForceP in all Old Icelandic relative clauses with *sá*. At this stage, there is no good evidence for nonattracting *sá* (recall that there are only a handful of examples in the learned-style *Hómilíubók*). Thus it appears that all Old Icelandic relative clauses introduced by *sá* have the structure in 55.

The final stage in the development of Icelandic *sá*, from a case-attracting relative pronoun illustrated in 58b to a nonattracting, German-style relative pronoun as in 58c, is first attested in the early-modern era. As we saw in §4.2, in the sixteenth and seventeenth centuries, some Icelandic authors use *sá* as both a case-attracting and a non-case-attracting relative pronoun. While this seems to have begun with Biblical translations and is thus arguably a product of language contact, by the seventeenth century this has spread to other types of texts, representing genuine language change. We thus have evidence for the final stage of the development illustrated in 58c. In terms of structure, this requires reanalyzing the position of *sá* from the agreeing position in Spec-AgrP down into the canonical position for relative pronouns in Spec-ForceP, as illustrated in 56. While, the AgrP/ForceP distinction was eventually collapsed in languages like German, leading to nonattracting pronouns only, in the history of Icelandic, *sá* disappears as a relative pronoun before that development is realized. Perhaps the development of relative *sá* might have proceeded all the way to a purely nonattracting pronoun had it not been completely replaced by the relative complementizer *sem* in Modern Icelandic.

It should be noted that by the seventeenth century, there are as many as three types of *sá* cooccurring: demonstrative *sá* (with deictic and cataphoric functions), case-attracting *sá*, and true relative *sá*. In other words, the reanalyses discussed in this section do not result in the loss of the source of the reanalysis. While it may seem unparsimonious to claim that all three types of *sá* were present at a single stage of the language, this is not an unusual situation for words of category D. For example, German *der* can be a

definite determiner, a demonstrative pronoun, or a relative pronoun; in spoken German, prosody and context disambiguate the three subcategories.

Consequently, *sá* continues to occur as a demonstrative into Modern Icelandic. This occurs even in the presence of relative clauses.

(61) **Sá, er** hann átti tal við, var **Jón sá, er** var að gifta sig …
SÁ RP he had talk with was J. SÁ RP was to marry REFL
'The one whom he had a talk with was that John who was to marry … '
(1882.TORFHILDUR.NAR-FIC,.1169)

However, I contend that such Modern Icelandic examples of *sá* with a following relative clause are demonstratives rather than relics of the earlier use as a relative pronoun. According to Thráinsson (2007:88), post-N demonstrative *sá* occurs in Modern Icelandic in 'bookish' style, so *sá* in examples like *Jón sá* can be considered a demonstrative. If my contention is correct that Modern Icelandic *sá* is always a demonstrative, then no explanation is required for the fact that at this stage of the language it agrees in case with the antecedent noun rather than the relativized argument.

5. GRAMMATICALIZATION AND CYCLIC CHANGE. I have proposed that case-attracting *sá* in Old Icelandic represents a transitional stage in a larger development from a demonstrative to a (nonattracting) relative pronoun, a development whose conclusion is obscured due to the rise of relative *sem*. In this section, I discuss how this development fits in with two broad conceptions of syntactic reanalysis: grammaticalization and cyclic change.

The notion that demonstrative pronouns can become relative pronouns is widely discussed in the grammaticalization literature. In fact, demonstratives may be the primary source of relative markers in the languages of the world (Heine & Kuteva 2002:115). However, the changes investigated in this article are potentially at odds with generative accounts of grammaticalization by Roberts and Roussou (2003) and van Gelderen (2004). In this view of grammaticalization, functional-class items result from movement of lexical items upward into functional projections. But the two structural reanalyses proposed here for *sá* appear to proceed downward in the tree structure: first from a cataphoric demonstrative in the matrix DP to a case-attracting relative pronoun in Spec-AgrP of the embedded clause, and later from Spec-AgrP to a true relative pronoun in Spec-ForceP. Indeed, both of these reanalyses share properties with changes identified by Roberts and Roussou (2003:208) as 'downward reanalysis' rather than (upward) grammaticalization. Neither of the two reanalyses proposed in this article involves a category change, because demonstrative, case-attracting relative, and true relative pronouns are all of category D. Nor is there any evidence for semantic bleaching (the demonstrative *sá* having already lost the ability to refer extralinguistically) or for phonological reduction. Thus while the reanalysis of demonstratives to relatives is frequently cited in the mainstream grammaticalization literature, the changes to *sá* in the history of Icelandic cannot be considered grammaticalization in the sense of Roberts and Roussou (2003) or van Gelderen (2004).

But if the development of *sá* from a demonstrative to a relative is not an instance of grammaticalization in the narrowest sense (being triggered neither by semantic bleaching nor by phonological reduction), why did *sá* come to be used as a relative in the first place? Perhaps this has to do not with the weakening of *sá* itself, but with the weakness of *er* as a marker of relative clauses. If this is correct, the weakness of relative *er* meant that *sá* was needed to more clearly delineate the beginning of a relative clause. A similar development occurred in the history of English relative clauses, with the replacement of the OE relative complementizer *þe* by a demonstrative pronoun *þæt*, via a stage in which the two cooccurred (van Gelderen 2004:81–82).

(62)	Old English:	þe	>	þat þe	>	þat
	Old Icelandic:	er	>	sá er	>	sá
		rel. particle		rel. pron. + particle		rel. pron.

There are several reasons why *er* was a less-than-perfect relative complementizer. First, relative *er* was phonologically light, as it could cliticize to the preceding pronoun (as in 27 above). Second, the particle *er* was an all-purpose complementizer, serving not only in relative clauses, but also as a marker of comparison (‘as’) and of various types of adverbial clauses (‘when’, ‘where’). The weakness and ambiguity of *er* gave rise to the need for accompanying words to disambiguate its function. When the complementizer of adverbial clauses, *er* could be accompanied by the adverb ‘then’ or ‘there’, and in relative clauses *sá* served the same purpose.

(63) a. þá er
then RP
‘when’
b. þar er
there RP
‘where’
c. sá er

In addition to its many functions as a complementizer, *er* was also homophonous with the third singular present tense of *vera* ‘to be’.

As to the final stage of the development illustrated in 62, I showed above that the reanalysis of *sá* to a true relative pronoun occurred in early-modern Icelandic, as attested by examples such as 48 and 49. Interestingly, in 48 there is no relative particle. This appears to be evidence for the final stage of the change: *sá* was able to serve as the sole relativizer in some clauses.[30] However, as I claimed regarding *sá* as a non-case-attracting pronoun, the sole use of *sá* as a relative marker was overshadowed by the increasing predominance of relative *sem*.

The development in 62 can be considered a cyclical change, because the end stage of the development can be the input for a similar change. In fact, by Modern English the former relative pronoun *þat* has become a relative complementizer *that*, and it can even occur with a phrasal relative pronoun such as *who* (as in 2) and *which* (see van Gelderen 2004:87–89). This cycle is reminiscent of Jespersen’s cycle, in which a negative particle (e.g. French *ne*) is reinforced (*ne ... pas*) and ultimately replaced by the reinforcing element (Jespersen 1917). Van Gelderen (2011) proposes that there is a broader ‘linguistic cycle’, whereby lexical items become functional items and then disappear (i.e. grammaticalization), followed by the introduction of a new lexical item to fill the same function as the lost one (renewal). What the relative pronoun cycles illustrated in 62 share with Jespersen’s cycle, but not necessarily with other cycles of loss and renewal, is the fact that the word responsible for renewal cooccurs with the word that is eventually lost. In other words, there is a period of redundancy that precedes renewal. I call this kind of change RENEWAL VIA REDUNDANCY.

As a final note, viewing *sá er* as part of a renewal-via-redundancy cycle helps explain changes with respect to the so-called doubly filled COMP filter (Chomsky & Lasnik 1977), which has been shown not to be universal because of examples like 1 and 2 above. Bayer and Brandner (2008) proposed that double complementation can be re-

[30] Similarly, Pittner (1995) finds that the disappearance of relative particles in early-modern German coincides with the loss of case attraction on the pronoun.

duced to lexical variation in the features of the relative pronoun. Applying Bayer and Brandner's proposal to the diachronic changes illustrated in 62, a language (like Modern English) that allows either a relative pronoun or a relative complementizer, but not both together, has a [− overt C] feature on the pronoun. When a pronoun is added to reinforce a weakened relative particle, this pronoun must have the feature [+ overt C] in order to allow its cooccurrence with the particle. Finally, when the pronoun alone suffices to mark the relative clause, the feature reverts to [− overt C] to disallow a doubly filled CP.

(64)

rel. pronoun OR rel. particle	>	rel. pronoun AND rel. particle	>	rel. pronoun OR rel. particle
[− overt C]		[+ overt C]		[− overt C]

The first change occurred before the emergence of Old Icelandic, resulting in doubly filled CPs with *sá er* (in relative clauses). The presence of double complementation in adverbial clauses like *þar er* 'there where' suggests that the [± overt C] feature can also occur on adverbs. The second change occurred in early-modern Icelandic, but has gone largely unnoticed because again the *sá er* construction was overshadowed by the new relative marker *sem*. Note, though, that Modern Icelandic continues to allow other types of double complementizers such as *þegar að* 'when that' (Larsson 2014:451). This seems to confirm the lexical nature of double complementizers: *sá* began to change to [− overt C] in early-modern Icelandic (just before disappearing as a relativizer), but the adverbs have remained [+ overt C] down to the present day.

6. CONCLUSION. This article has investigated changes to various relative markers in the history of Icelandic. Section 2 shows that the relative complementizer *er* and the pronoun *sá*, which often accompanies *er*, decline over time and are replaced by the complementizer *sem*. In §3, I argued on semantic and distributional criteria that the demonstrative pronoun *sá* in many examples has been reanalyzed as a relative pronoun. However, this relative pronoun shows pervasive case attraction in Old Icelandic and only begins to behave as a true, nonattracting relative pronoun in the seventeenth century, just before it is replaced by *sem*. In §4, I account for the case-attracting relative pronouns as a transitional stage between demonstrative pronouns and nonattracting pronouns. The development in Old Icelandic appears to be rather unusual, because this transitional stage coincides with the flourishing of Old Icelandic literature, thus leaving the misleading impression that demonstrative *sá* developed into a case-attracting relative pronoun but never became a true relative pronoun. In formal terms, I capture this development in a split-CP analysis, such that case-attracting *sá* is in Spec-AgrP, the phase edge of the CP system and thus accessible to agreement with the antecedent, while nonattracting relative pronouns are lower down in Spec-ForceP.

As discussed in §5, this study has three broader implications. First, although the grammaticalization literature discusses the reanalysis of demonstratives to relative pronouns, the reanalysis of *sá* from a demonstrative to a relative pronoun is less compatible with grammaticalization and more akin to downward reanalysis in the sense of Roberts & Roussou 2003. Second, unlike more straightforward instances of loss and renewal, the replacement of relative complementizers such as *er* by relative pronouns is not a straightforward development, but proceeds through a stage in which two relative markers are used in tandem (so-called double complementation). I have called this kind of change, of which Jespersen's cycle is another example, renewal via redundancy. Third, double complementation can be accounted for by assuming that WH-moved subordinators, such as relative pronouns, have a [± overt C] allowing for the cooccurrence

of an overt complementizer. The fact that Modern Icelandic no longer allows double complementation in relative clauses but does allow it in adverbial clauses is evidence that this is a feature of individual lexical items rather than a more general principle such as the doubly filled COMP filter.

REFERENCES

Primary sources

Aðalbjarnarson, Bjarni (ed.) 1979. *Heimskringla* I. (Íslenzk fornrit 26.) Reykjavík: Hið íslenzk fornritafélag.

Clunies Ross, Margaret; Kari Ellen Gade; Guðrún Nordal; Edith Marold; Diana Whaley; and Tarrin Wills (eds.) 2012. *The skaldic project*. Online: http://skaldic.abdn.ac.uk/db.php.

Karlsson, Bjarki; Þórhallur Eyþórsson; and Kristján Árnason (eds.) 2012. *Greinir skáldskapar*. Online: http://bragi.info.is/greinir.

Rundata 3.0. 2014. *Samnordisk Rundatabas*. University of Uppsala. Online: http://www.nordiska.uu.se/forskn/samnord.htm.

Taeger, Burkhard (ed.) 1984. *Heliand und Genesis*. 9th edn. Tübingen: Niemeyer.

Wallenberg, Joel; Anton Karl Ingason; Einar Freyr Sigurðsson; and Eiríkur Rögnvaldsson (eds.) 2011. Icelandic Parsed Historical Corpus (IcePaHC). Version 0.9. Online: http://www.linguist.is/icelandic_treebank.

Secondary sources

Abney, Steven. 1987. *The English noun phrase in its sentential aspect*. Cambridge, MA: MIT dissertation.

Åfarli, Tor A. 1995. A unified analysis of relative clause formation in Old Norse. *Papers from the XVth Scandinavian conference, Oslo, January 13–15, 1995*, ed. by Inger Moen, Hanne Gram Simonsen, and Helge Lødrup, 533–43. Oslo: Department of Linguistics, University of Oslo.

Bayer, Josef. 1984. COMP in Bavarian syntax. *The Linguistic Review* 3.209–74. DOI: 10.1515/tlir.1984.3.3.209.

Bayer, Josef, and Ellen Brandner. 2008. On wh-head-movement and the doubly-filled-comp filter. *West Coast Conference on Formal Linguistics (WCCFL)* 26.87–95. Online: http://www.lingref.com/cpp/wccfl/26/paper1659.pdf.

Bianchi, Valentina. 2000. Some issues in the syntax of relative determiners. *The syntax of relative clauses*, ed. by Artemis Alexiadou, Paul Law, André Meinunger, and Chris Wilder, 53–81. Amsterdam: John Benjamins.

Bickerton, Derek. 1981. *Roots of language*. Ann Arbor, MI: Karoma.

Bošković, Željko. 2014. Now I'm a phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic Inquiry* 45.27–89. DOI: 10.1162/LING_a_00148.

Brandner, Ellen, and Iris Bräuning. 2013. Relative *wo* in Alemannic: Only a complementizer? *Linguistische Berichte* 234.131–69.

Buzzoni, Marina. 2016. A protocol for scholarly digital editions? The Italian point of view. *Digital scholarly editing: Theories and practices*, ed. by Matthew James Driscoll and Elena Pierazzo, 59–82. Cambridge: Open Book. Online: https://www.openbookpublishers.com/product/483.

Carnie, Andrew. 2013. *Syntax: A generative introduction*. 3rd edn. Oxford: Wiley-Blackwell.

Chomsky, Noam. 1995. *The minimalist program*. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. *Ken Hale: A life in language*, ed. by Michael Kenstowicz, 1–52. Cambridge, MA: MIT Press.

Chomsky, Noam, and Howard Lasnik. 1977. Filters and control. *Linguistic Inquiry* 8.425–504. Online: https://www.jstor.org/stable/4177996.

Cinque, Guglielmo. 2010. *The syntax of adjectives: A comparative study*. Cambridge, MA: MIT Press.

de Vries, Mark. 2001. Patterns of relative clauses. *Linguistics in the Netherlands* 2001. 231–43. DOI: 10.1075/avt.18.23vri.

Diessel, Holger. 1999. *Demonstratives: Form, function, and grammaticalization*. Amsterdam: John Benjamins.
Dyvik, Helge. 1979. Omkring fremveksten av artiklene i norsk. *Maal og minne* 1979.40–78.
Erdmann, Oskar. 1874. *Untersuchungen über die Syntax der Sprache Otfrids*, part 1. Halle: Verlag der Buchhandlung des Waisenhauses.
Evans, Elliot. 2017. Case attraction in Old High German. Paper presented at the 23rd Germanic Linguistics Annual Conference, University of Texas at Austin.
Faarlund, Jan Terje. 2004. *The syntax of Old Norse*. Oxford: Oxford University Press.
Fanselow, Gisbert, and Sascha Felix. 1987. *Sprachtheorie: Eine Einführung in die Generative Grammatik*, vol. 2. 3rd edn. Tübingen: Francke.
Gade, Kari Ellen. 1995. *The structure of Old Norse* dróttkvætt *poetry*. Ithaca, NY: Cornell University Press.
Gordon, E. V. 1988. *An introduction to Old Norse*. Oxford: Oxford University Press.
Harbert, Wayne. 1989. Case attraction and the hierarchization of case. *Eastern States Conference on Linguistics (ESCOL)* 6.138–49.
Harbert, Wayne. 1992. Gothic relative clauses and syntactic theory. *On Germanic linguistics: Issues and methods*, ed. by Irmengard Rauch, Gerald Carr, and Robert Kyes, 109–46. Berlin: Mouton de Gruyter.
Harbert, Wayne. 2007. *The Germanic languages*. Cambridge: Cambridge University Press.
Heine, Bernd, and Tania Kuteva. 2002. *World lexicon of grammaticalization*. Cambridge: Cambridge University Press.
Heusler, Andreas. 1950. *Altisländisches Elementarbuch*. 4th edn. Heidelberg: Winter.
Jespersen, Otto. 1917. *Negation in English and other languages*. Copenhagen: Høst.
Jónsson, Jóhannes Gísli. 2017. Why *sem* is (still) a complementizer and not a relative pronoun. *A schrift to fest Kyle Johnson* (Linguistics open access publications 1), ed. by Nicholas LaCara, Keir Moulton, and Anne-Michelle Tessier. Online: http://scholarworks.umass.edu/linguist_oapubs/1.
Kayne, Richard. 1994. *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
Klinghardt, Hermann. 1884. *Die relative Satzbindung im Heliand: Eine syntaktische Untersuchung*. Wrocław: Breslauer Genossenschafts-Buchdruckerei.
Kratzer, Angelika, and Elisabeth Selkirk. 2007. Phase theory and prosodic spellout: The case of verbs. *The Linguistic Review* 24.93–135. DOI: 10.1515/TLR.2007.005.
Kuhn, Hans. 1933. Zur Wortstellung und -betonung im Altgermanischen. *Beiträge zur Geschichte der deutschen Sprache und Literatur* 57.1–109. DOI: 10.1515/bgsl.1933.1933.57.1.
Larsson, Ida. 2014. Double complementizers. *Nordic Atlas of Language Structures* 1.447–57. DOI: 10.5617/nals.5413.
Lightfoot, David. 1979. *Principles of diachronic syntax*. Cambridge: Cambridge University Press.
Lindblad, Gustaf. 1943. *Relativ satsfogning i de nordiska fornspråken*. Lund: A. B. Gleerups Universitetsbokhandeln.
Mitchell, Bruce. 1985. *Old English syntax*, vol. 2. Oxford: Oxford University Press.
Nygaard, Marius. 1905. *Norrøn syntax*. Kristiania: Aschehoug.
Pittner, Karin. 1995. The case of German relatives. *The Linguistic Review* 12.197–232. DOI: 10.1515/tlir.1995.12.3.197.
R Core Team. 2013. R: A language and environment for statistical computing. Vienna: R Foundation for Statistical Computing. Online: https://www.r-project.org/.
Randall, Beth. 2009. Corpus Search 2: A tool for linguistic research. Philadelphia: University of Pennsylvania. Online: http://corpussearch.sourceforge.net/.
Ringe, Don, and Ann Taylor. 2014. *The development of Old English*. Oxford: Oxford University Press.
Rizzi, Luigi. 1990. *Relativized minimality*. Cambridge, MA: MIT Press.
Rizzi, Luigi. 1997. The fine structure of the left periphery. *Elements of grammar*, ed. by Liliane Haegeman, 281–337. Dordrecht: Kluwer.
Roberts, Ian, and Anna Roussou. 2003. *Syntactic change: A minimalist approach to grammaticalization*. Cambridge: Cambridge University Press.

ROEHRS, DORIAN. 2000. Relative clause constructions in the Germanic languages: A case for both a correlative and a relative pronoun. Bloomington: Indiana University, MS.
ROEHRS, DORIAN. 2013. The inner makeup of definite determiners: The case of Germanic. *Journal of Germanic Linguistics* 25.295–411. DOI: 10.1017/S1470542713000147.
ROEHRS, DORIAN, and CHRISTOPHER D. SAPP. 2016. *Quantifying expressions in the history of German*. Amsterdam: John Benjamins.
SAPP, CHRISTOPHER D. 2018. Relative clause types and the dating of Eddic and skaldic poetry. Oxford: University of Mississippi, MS.
SELKIRK, ELISABETH. 2005. Comments on intonational phrasing in English. *Prosodies (with special reference to Iberian languages)*, ed. by Sónia Frota, Marina Vigário, and Maria João Freitas, 11–58. Berlin: Mouton de Gruyter.
THRÁINSSON, HÖSKULDUR. 1980. Tilvísunarfornöfn? *Íslenskt mál og almenn málfræði* 2.53–96. Online: http://timarit.is/view_page_init.jsp?pubId=832.
THRÁINSSON, HÖSKULDUR. 2007. *The syntax of Icelandic*. Cambridge: Cambridge University Press.
TOTSUKA, MASASHI. 2013. On phase head in split CP hypothesis. *English Linguistics* 30. 204–15. DOI: 10.9793/elsj.30.1_204.
VAN GELDEREN, ELLY. 2004. *Grammaticalization as economy*. Amsterdam: John Benjamins.
VAN GELDEREN, ELLY. 2011. *The linguistic cycle: Language change and the language faculty*. Oxford: Oxford University Press.
WAGENER, TERJE. 2017. *The history of Nordic relative clauses*. Berlin: Mouton de Gruyter.
WILHELMY, EMIL. 1881. *Die Einleitungen der Relativsätze im Heliand*. Leipzig: Bockwitz & Webel.

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