

Chapter 3

MEDIEVAL TO MODERN: USING SPATIAL DATA FROM THE DIGITAL PROJECTS ICELANDIC SAGA MAP AND NAFNIÐ.IS TO EXPLORE THE INTERACTION BETWEEN NARRATIVE AND PLACE IN ICELAND

Emily Lethbridge*

IN THIS CHAPTER, two digital projects that mediate Icelandic cultural landscapes are introduced and described. The development of both these spatial data projects has been led by the author of this chapter, and both projects are housed at the Árni Magnússon Institute for Icelandic Studies in Reykjavík, Iceland. After information about each project has been provided, a case study is given to illustrate some of the ways that the two online tools can be used to explore data-driven research questions about Icelandic cultural landscapes and their changing contours over time, from the medieval period to modern times. The two projects have, of course, drawn much inspiration from various older digital spatial projects, as well as being products more generally of the spatial turn in the humanities that has been gaining traction over the past couple of decades.¹ The format and functionality of the two projects are indebted in particular to online literary and cultural heritage mapping projects such as “Mapping the Lakes: A Literary GIS” (and the later, related project “Mapping Lake District Writing, 1622–1900”), the “Map of Early Modern London,” the “Literary Atlas of Europe,” and “Mapping Manuscript

* Emily Lethbridge has a PhD in medieval Icelandic language and literature from the University of Cambridge. She is currently Associate Research Professor and Head of the Onomastics Department at the Árni Magnússon Research Institute for Icelandic Studies, Reykjavík, Iceland. Her research explores the complex and dynamic relationships between medieval Icelandic narrative works (e.g., sagas of Icelanders) and the manuscript and landscape contexts through which these narratives were transmitted from the medieval period to the present day. She has also developed digital projects, such as the Icelandic Saga Map project and Nafnið.is, and teaches at the University of Iceland. Email: emily.lethbridge@arnastofnun.is. Appreciation and thanks are due to the editors of this volume for their helpful feedback on an earlier draft of this chapter, and also to Garðar Guðgeirsson for help with data analysis.

¹ See, e.g., Bodenhamer, Corrigan, and Harris, *The Spatial Humanities*; Gregory and Geddes, *Toward Spatial Humanities*; Presner and Shepard, “Mapping the Geospatial Turn”; Cooper, Donaldson, and Murrieta-Flores, *Literary Mapping in the Digital Age*; Bushell, *Reading and Mapping Fiction*; Berman, Mostern, and Southall, *Placing Names*; and Travis, Ludlow, and Gyuris, *Historical Geography*.

Migrations,” on the one hand, and, on the other hand, to more explicit place-name-oriented projects such as “NameSampo: A Workbench for Toponomastic Research,” the “Berwickshire Place-Name Resource,” and the “Key to English Place-Names,” among other online toponomastic resources.² Projects such as the Norske stedsnavn resource and Norse World have been looked to for exemplary practice regarding data curation and publication, as well as for inspiration.³

Icelandic Saga Map

In 2011, interested in the important role that topography plays in medieval Icelandic *Íslendingasögur* (“sagas of Icelanders”) narratives, I travelled around Iceland exploring the landscape settings of each saga. I became aware of the extensive geographical overlap between individual narratives, and the role that landscape played in transmitting these narratives (in tandem with parchment and paper manuscript copies of saga texts) from medieval to modern times.⁴ Exploring at first hand how the events that the *Íslendingasögur* describe are mapped onto and around the landscape, and commemorated in place-names, was a compelling approach to this remarkable body of literature. No less illuminating was witnessing how Icelanders today engaged with their local and national saga heritage.⁵ An interactive digital map was the obvious choice of media through which to display and interrogate, in a visual and dynamic way, the relationships between the sagas and the landscape.

The first iteration of the Icelandic Saga Map (ISM) project was launched in 2015.⁶ The intended users included saga scholars and the general public; beyond these groups, it seems that the website has been used by teachers and tour guides, among others. From the outset ISM has been a collaborative project, with work financed by different funding bodies, technical development undertaken by three individuals, and data input

² See www.lancaster.ac.uk/mappingthelakes, www.lancaster.ac.uk/fass/projects/spatialhum.wordpress/?page_id=43, <https://mapoflondon.uvic.ca/index.htm>, www.literaturatlas.eu/en, <https://mappingmanuscriptmigrations.org>, <https://nimisampo.fi/en/app>, <https://berwickshire-placenames.glasgow.ac.uk> and <http://kepn.nottingham.ac.uk> (all accessed March 3, 2023).

³ See <https://toponymi.spraksamlingane.no/nb/app> and www.uu.se/en/research/infrastructure/norseworld (both accessed May 9, 2021). On the latter project, see further Chapter 1 in the present volume.

⁴ See Lethbridge (with Krieg and Hartman), “Mapping Environmental Memory.” On the simultaneous transmission of the sagas in landscape and manuscript contexts, see Lethbridge, “The Icelandic Sagas and Saga Landscapes.”

⁵ Blogposts written at the time are still available at <http://sagasteads.blogspot.com> (accessed May 10, 2021), and a short documentary film, *Memories of Old Awake*, that was produced by Emily Lethbridge and Patrick Chadwick for the University of Cambridge about the relationship between living Icelanders and saga protagonists can be watched online at www.youtube.com/watch?v=2Z4_BhW1sI8.

⁶ See <https://sagamap.hi.is> (accessed May 8, 2021).

and curation by a number of student interns.⁷ The primary task was geo-referencing texts of the forty or so sagas in the *Íslendingasögur* genre. Coordinates for Icelandic place-names were generally taken from the Landmælingar Íslands (National Land Survey of Iceland) database or the Ja.is yellow pages and map resource; coordinates for places outside Iceland (since the narratives' geographical stage often extends beyond Iceland) were taken from sources such as Google Maps, cross-checked in some instances with gazetteers such as the Getty Thesaurus of Geographic Names Online or GeoNames.⁸ Subsequently other medieval Icelandic genres have been added to the database, namely the *þættir* (short tales of Icelanders), *Orkneyinga saga* (the saga of the Orkney Islanders) and *Færeyinga saga* (the saga of the Faroe Islanders), selections from *Sturlunga saga* and *biskupasögur* (contemporary sagas and bishops' sagas), and historical works such as *Landnámabók* and annals. In addition, several nineteenth-century Icelandic travel books that describe visits to saga-sites have been geo-referenced and added to the database. The core dataset thus comprises geo-referenced place-names in a relational (PostgreSQL) database (see Figure 3.1 for a diagram of entity relationships): place-names are linked to sagas (and specific chapters within sagas), and other information specified includes fields such as "Place-type." Users can select one saga (or other text) or multiple sagas; places in the selected narrative(s) display on the map view, while the text (with hyperlinked place-names) is displayed alongside. Selecting point data on the map view brings up information about other texts in which that place appears.

Participation in the NSF-funded data infrastructure project DataArc⁹ (2016–2021) provided the opportunity to overhaul the ISM backend and migrate the system over to a Django Python Web framework, and to implement a shared ontological mapping framework that enables conceptual linking between ISM data and the various other textual and environmental archaeological datasets that are part of the DataArc project. In addition to this, a "manuscript layer" was added to the database: information about

⁷ The ISM project has received funding from Rannís (Rannsóknamiðstöð Íslands, the Icelandic Centre for Research: Rannsóknasjóður grant 2014, Rannsóknasjóður Sigrúnar Ástrórar Sigurðardóttur og Haralds Sigurðssonar grant 2015), Háskóli Íslands (University of Iceland: Rannsóknarsjóður grant 2016, first prize in Hagnýtingarverðlaun/Applied Science competition, 2015), and the US National Science Foundation (2016). Programmers involved are Trausti Dagsson (development of full-scale database), Pétur Húni Björnsson (extension of database), and Logi Ragnarsson (prototype). Gísli Pálsson, Hjördís Erna Sigurðardóttir, Jack Hartley, Magnús Jochum Pálsson, Nikola Macháčeková, and Zachary Melton have all worked on aspects of data input on the project.

⁸ See www.lmi.is, <https://ja.is>, <https://google.is/maps>, www.getty.edu/research/tools/vocabularies/tgn, and www.geonames.org (all accessed May 9, 2021). Note that, for consistency, modern Icelandic orthography is used in this chapter for all place-names; modern Icelandic is the default orthography for place-names in the ISM database too, although orthographical variation is of course found in extant manuscript texts, and it would be interesting to chart this variation and make it accessible to ISM users.

⁹ Full project title: "Building Cyberinfrastructure to Enable Interdisciplinary Research on the Long-Term Human Ecodynamics of the North Atlantic" (2016–2021). See the project website at www.data-arc.org and the data discovery tool at <https://ui.data-arc.org> (both accessed May 9, 2021).

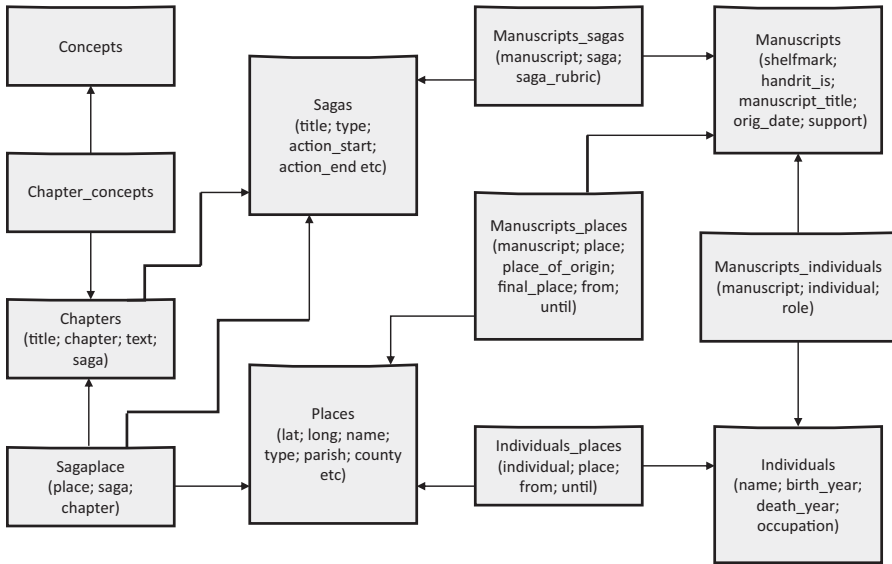


Figure 3.1. Entity relationship diagram of Icelandic Saga Map backend.

Image by Pétur Húni Björnsson and Emily Lethbridge.

all Icelandic manuscripts that preserve texts of the *Íslendingasögur*, both parchment and paper, dating from the thirteenth century to the nineteenth, and places these manuscripts have been associated with, was compiled and input. The incorporation of this dataset enhances the potential of ISM as a tool that supports efforts to explore the dynamic and reciprocal relationship between narrative and place, and the transmission of saga narratives in geographical space. When the sagas were first put down in writing, their narrative contours were shaped in various ways by the landscapes in which their events take place; the influence exerted by landscape on saga narrative was, moreover, sustained for as long as the sagas were copied and retold in their landscape settings. Equally, the Icelandic landscape itself—cultural perceptions of it, and even ideological, intellectual, and political uses of it—has been shaped as a result of the transmission of saga narratives in and around it over the course of many centuries.¹⁰

The process of developing ISM highlighted various methodological challenges inherent in any attempt to “map” this corpus of narratives. The nature of place-names and their propensity to change over time, to be moved or transferred from one place to another, to fall out of use and subsequently be brought back into the toponymicon presents one set of issues—in conjunction with landscape change, whether this is on

¹⁰ See, e.g., Wyatt, “The Landscape of the Icelandic Sagas”; Lethbridge, “The Icelandic Sagas and Saga Landscapes”; and Bolender and Aldred, “A Restless Medieval?”

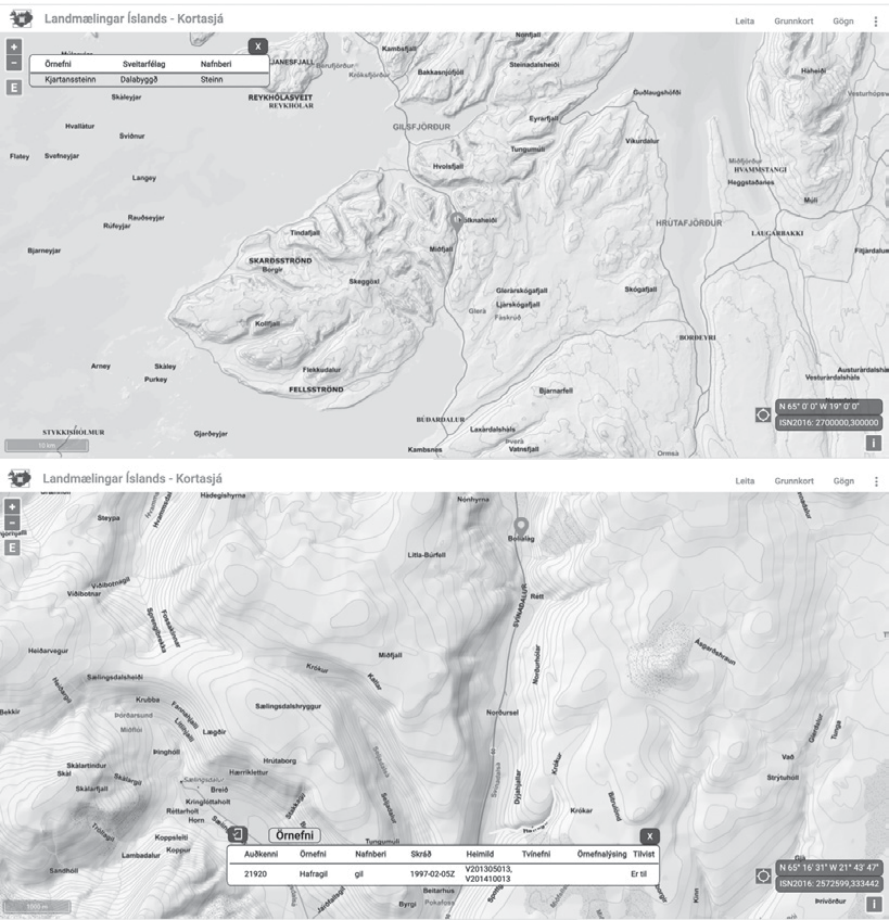
account of human activity or natural geomorphological processes.¹¹ While the association of most place-names in medieval Icelandic written sources with geographical locations that bear the same name in contemporary landscapes is on the whole relatively secure, there are nonetheless some ambiguous or problematic cases. A recurrent theme in saga scholarship in the late nineteenth and twentieth centuries (explored in particular in introductions to textual editions of the sagas, in archaeological reports, in articles printed in local or regional publications, and in travel books on Iceland authored by foreign visitors) revolved around attempts to definitively identify such moot places. Such lines of enquiry were (and are still, when attempted) complicated methodologically, however, by literary critical assumptions regarding genre and the nature of these narrative works—which is to say, their assumed “historicity,” or their lack of it.¹² My opinion is that an approach to the sagas as a narrative genre that acknowledges the ways in which places and landscapes in them are simultaneously real *and* imagined (drawing on the work of cultural geographer Edward W. Soja, and literary theorists Sally Bushell, Robert T. Tally Jr., and Bertrand Westphal, among others) is more productive, giving room for understanding the interactive and reciprocal relationship between narrative and place over time.

A good example to illustrate these points is the identification of Kjartanssteinn (“Kjartan’s stone”), a large rock that the saga hero Kjartan Ólafsson is said to have had behind him as he fought off attackers, who, in the end, killed him on the spot. The story of Kjartan’s last fight is told in *Laxdæla saga* (chapters 48 to 49), and the encounter is supposed to have happened somewhere in the Svínadalur Valley in the Dalir region, in west Iceland. The saga describes the immediate topography and mentions a gully called Hafragil (or Hafrsgil, a variant reading in some manuscripts), where the attackers hide before they ambush Kjartan, who is travelling south through the valley. The attack happens once Kjartan reaches this gully, and the saga narrator mentions the stone, which is where Kjartan tells his attackers to come and get him.¹³ But nothing more is said about the stone in the saga narrative, and it is not given a name either in any extant textual witnesses. Today, a large boulder that sits in a prominent place some 4.5 km north of Hafragil is often given the name Kjartanssteinn and said to be the spot where Kjartan died, in the arms of his foster-brother Bolli, who delivered the killer blow. As can be seen from the screenshots (see [Figures 3.2 \(a\) and \(b\)](#)), Bolli is also commemorated in the present-day landscape in the place-name Bollalág (“Bolli’s hollow”). Nineteenth- and twentieth-century scholars and commentators have made various attempts to “explain” the discrepancy regarding the lack of a large rock in the close vicinity

11 On instability in the Icelandic toponymicon, see, e.g., Sveinbjörn Rafnsson, *Byggðaleifar*, with regard to local areas in the east of Iceland. On landscape change in Iceland, see, e.g., Caseldine, Russell, Harðardóttir, and Knudsen, *Iceland*.

12 See, e.g., Callow, “Dating and Origins”; O’Connor, “History and Fiction”; and Grøsfjeld, *Sagakritikkens historie*.

13 “En þá Kjartan bar brátt at, er þeir riðu hart, ok er þeir kómu suðr yfir gilit, þá sá þeir fyrirsátina ok kenndu mennina. Kjartan spratt þegar af baki ok sneri í móti þeim Ösvífrssonum. Þar stóð steinn einn mikill. Þar bað Kjartan þá við taka.” Einar Ólafur Sveinsson, *Laxdæla saga*, 152.



Figures 3.2 (a) and (b). Screenshots of LMÍ maps showing the locations of Kjartanssteinn, Bollalág, and Hafrágil according to data in the LMÍ database. Images by Emily Lethbridge.

of Hafrágil. Some supported the identification of the rock 4.5 km to the north as the “authentic” Kjartanssteinn but others disputed this identification, arguing, for example, that landscape change must be the cause of the lack of a large boulder near Hafrágil, and that the boulder that had to have once been there—the “original” Kjartanssteinn—must have been swept away by spring thaws or some other natural process. The possibility that the boulder might have been a literary elaboration or adaptation on the part of the saga writer has not been allowed for, except in the context of this “proving” the sagas to be “unreliable” records for the events they describe.¹⁴

¹⁴ See, e.g., Sigurður Vigfússon, “Rannsókn,” 67–69; Kálund, *Íslenskir sögustaðir*, 2:106; Þorsteinn Þorsteinsson, “Bærin,” 58; and Árni Björnsson, “Safnað.”

Two other categories of saga place-names that presented challenges regarding “locating” and deciding on GIS coordinates for the purposes of displaying locations on the ISM map interface are 1) Icelandic toponyms that simply disappeared from the toponymicon at some point after the sagas were written down, and 2) places and place-names beyond Iceland that could not be accurately pinpointed. It is important to remember that, although the *Íslendingasögur* are very much anchored in Icelandic landscapes, Iceland is connected in these narratives to the wider world, and saga protagonists travel abroad regularly for trade, to gain honour, or on account of a sentence of outlawry, for example.¹⁵ Thus, saga locations include places around Scandinavia (for example, at the courts of Scandinavian kings) and the British Isles, places further to the east (Grettir Ásmundarson, for example, is avenged in Constantinople), and further to the west: Greenland and North America. These places stand apart in certain ways from the examples discussed in the preceding paragraph, generally being higher-level—for instance, settlement names, and even whole areas—as is the case regarding regions on the eastern seaboard of North America, as described in *Eiríks saga rauða* and *Grænlandinga saga*, for example. Considerable academic (and public) debate has unfolded regarding where, for example, saga writers might have believed Helluland (“slab-land”), Markland (“forest-land”), Vín- or Vinland (“vine/wine-land”), Furðustrandir (“marvellous beaches”), Leifsbúðir (“Leifur’s camp”), Krossanes (“cross peninsula”), Bjarney (“bear island”), Straumsfjörður (“current fjord”), Hóp (“lagoon”), and Kjalarnes (“keel peninsula”) in North America to have been.¹⁶ And what about Einfætingaland (“uniped-land”)?¹⁷ In each of these cases, for the purposes of the ISM map interface displaying a location, a pin was put down in the area believed in scholarly discussion to have been likely—but efforts have been made on the website and in print publications to underline the fact that the location of a pin ought not to be interpreted as a definitive statement regarding the location of such ambiguous toponyms.¹⁸ In addition, work is ongoing on implementing an “(un)certainty scale” for individual toponyms that appear on the ISM user interface, along the lines of the solutions proposed by the “Literary Atlas of Europe” project.¹⁹ The key point here is that what is being mapped is both real and imagined—and that the relationship between saga narrative and geographical place is complex, entangled, and dynamic.

15 See, e.g., Barraclough, “Travel”; and Jesch, “Geography and Travel.”

16 See the detailed discussion in Gísli Sigurðsson, *The Medieval Icelandic Saga*, especially at 272–302. As is very often the case, there is a political and ideological dimension to place-names and motivations for ascertaining their location: in this case, there is a history of indigenous erasure and white supremacy that needs to be acknowledged. See, e.g., Crocker, “What We Talk About,” and, more generally, Höfig, “Vínland and White Nationalism.”

17 See, e.g., Larrington, “Undruðusk þá,” 112.

18 See, e.g., Lethbridge, “Digital Mapping,” 25–26, where the issue of merging literary mapping or cartography with more “historical” GIS cartographic practices is discussed.

19 See further Reuschel and Hurni, “Modelling Uncertain Geodata.”

Nafnið.is

Nafnið.is is an online user interface that provides free access to scanned and searchable versions of documents in the place-name archive held by the Árni Magnússon Institute for Icelandic Studies in Reykjavík.²⁰ The parts of the archive that have been made accessible in the first iteration of the Nafnið.is project comprise approximately 12,000 items in mixed media (text documents, printed maps that have been annotated by hand, hand-drawn maps, images).²¹ The project was funded by an infrastructure grant awarded by Rannís (Rannsóknamiðstöð Íslands, the Icelandic Centre for Research) in 2018, and by a University of Iceland grant awarded in 2020; the beta version of the database and user interface was opened for public use in December 2020.

The archive as it is today has a long history. The oldest document preserved in the collection is a handwritten register of names for fishing stations (Icelandic: *fiskimið*) off the coast of northern Iceland that were noted down in the mid-nineteenth century by Jón Klemensson, a local district sheriff (d. 1862). Another early set of documents includes handwritten working drafts, along with finished versions in fair copy, of place-name registers for individual farms in parts of southern Iceland; these registers were put together by Brynjúlfur Jónsson (d. 1914), who was a pioneering figure in the earliest efforts to collect Icelandic place-names on an organized, farm-by-farm basis in the early twentieth century. After Brynjúlfur's time, place-name collection became one of the official responsibilities of Hið íslenska fornleifafélagið (the Icelandic Archaeological Society), and individuals were given grants to fund the necessary fieldwork.²² Documents from these times include place-name registers for Bárðastrandarsýsla in western Iceland, assembled in the 1930s by Samúel Eggertsson. Place-name registers compiled by individuals working as part of the Icelandic Archaeological Society's initiative were held by Þjóðminjasafn Íslands (the National Museum of Iceland) until the establishment in 1969 of a special division within the Þjóðminjasafn, Örnefnastofnun Þjóðminjasafns (the National Museum of Iceland's Place-Name Institute), whose sole responsibility was the collection and curation of place-name material. Þórhallur Vilmundarson was appointed head of this new division, which later became autonomous in 1998 under the name Örnefnastofnun Íslands (the Place-Name Institute of Iceland), with Svavar Sigmundsson as its head. Finally, in 2006, Örnefnastofnun Íslands became part of the

²⁰ See <https://nafnið.is> and <https://nafnid.is> (both accessed May 9, 2021).

²¹ Other items in the archive include working materials produced by the Danish army as part of its surveying work in the early twentieth century; working materials produced by Samúel Eggertsson (d. 1949), a cartographer, designer, and place-name collector; card indexes that contain, e.g., registers of Icelandic place-names in North America, and place-names that occur in medieval charters (*fornbréf*); various accessions books; and records of meetings held by the Örnefnanefnd Íslands (Place-Name Committee of Iceland).

²² In an account of the annual meeting for 1918, the suggestion that “að félagið gengist fyrir því að safna örnefnum um allt land og skrásetja þau” (“that the group should organize the collection of place-names around the country, and register them”) was agreed upon. See Hið íslenska fornleifafélag, “Skýrsla,” 36.

Árni Magnússon Institute for Icelandic Studies, and the place-name collection became the responsibility of the onomastics department (Nafnfræðisvið) of this research institute.²³

The work of Örnefnastofnun Þjóðminjasafns and, subsequently, Örnefnastofnun Íslands centred heavily around filling out the existing place-name record of Iceland on an organized basis so that records existed of place-names used (or known of) on all farms in Iceland.²⁴ To this end, older records were revised and expanded, and questionnaires were sent out that asked for more detail about certain points (e.g., the orthography and/or origins of certain place-names, what landscape features place-names referred to, information about farming practices, folktales associated with place-names, etc.). The core of the Icelandic place-name archive that has just been digitized and opened to the public and to researchers is thus an extensive corpus of documents that differs in certain respects from many other Scandinavian place-name collections in being a set of descriptive records of individual farm estates, rather than card-indexed records of toponyms accompanied by, for example, notes on pronunciation, alternative spellings, or written sources. Whereas, earlier in the history of place-name collection in Iceland, prominent figures such as Björn M. Olsen and Kristján Eldjárn noted how far behind other Scandinavian countries Iceland was in getting such initiatives going, the result of the great efforts put into collecting not only the place-names themselves but also huge amounts of contextual detail (environmental, agricultural, cultural, linguistic) makes the archive today an extraordinarily rich repository of information about the landscape of Iceland.²⁵ As well as including some half a million toponyms (many of which are micro-toponyms), the records were produced over a period of time when human interaction with the landscape was changing suddenly and dramatically in a myriad of ways, partly as a result of the introduction of technological advances in agriculture, partly as the result of a shift in settlement patterns, previously stable for many centuries.

Building the Nafnið.is database and user interface was a large and complex project that required the coordinated technical development efforts of several individuals based at the Árni Magnússon Institute and at our partner institute, Landmælingar Íslands, as well as a team of students whose work was directed by me and my colleague within the onomastics department, Aðalsteinn Hákonarson. The students worked their way methodically through the archive, checking paper records against PDF files; cataloguing each document electronically in a Django web framework set up by the project programmers, Trausti Dagsson and Pétur Húni Björnsson; inputting information

23 For further details, see Svavar Sigmundsson, "Ortnamnsforskning"; and Jónína Hafsteinsdóttir, "Annáll."

24 Þórhallur Vilmundarson published a very detailed booklet covering all aspects of how to collect and organize place-name data in 1972 under the title "Leiðbeiningar um örnefnaskráning."

25 Björn M. Ólsen, "Rannsóknir"; Kristján Eldjárn, "Nokkrar leiðbeiningar." Björn M. Ólsen (1850–1919) was the first rector of the University of Iceland and professor of Icelandic language and culture from the university's founding in 1911. Kristján Eldjárn (1916–1982) was an archaeologist, head of the National Museum of Iceland, and, between 1968 and 1980, president of Iceland.

in each case about the type of document, primary collector, and informants (adding their dates of birth and death when possible); and checking over the OCR-generated list of place-names associated with each individual document. Each document was assigned a geographical location so that the distribution might be displayed in the map view section of the user interface; where possible, GIS coordinates for individual toponyms in respective documents also appear, with that data drawn from the Landmælingar Íslands database.²⁶ Other work (some of which is ongoing) involved scanning documents that did not exist in digital form, typing up documents that existed only in handwritten copy (and therefore could not be put through the OCR process developed for extracting text and place-names from the text corpus), and building an API to enable those users wishing to download the data directly themselves; see Figure 3.3 for a diagram of the database's entity relationships.²⁷

The search interface enables the user to input a place-name (this might be a landscape feature, or a farm name, for example), and the search returns all results for that toponym. Filters that can be applied to search results include geographical area (county or parish) and type of document (place-name register, follow-up questionnaire, answers to questionnaires, maps, etc.); date of production will be added as a filter in the future. Alternatively, the collection can be browsed “from above,” by region, so that all records for a defined area can be identified using the map view. Once a specific record is selected (whether via a point on the map, or the title of a document that appears in the list of search results), the document itself can be viewed (and downloaded) via a PDF viewer, and the list of place-names included in it are displayed in alphabetical order. Searches can be saved, with individual files bookmarked for later inspection. The structure of the database also allows users to move from one record to another on the basis of individuals who are associated with any single document (whether collectors or informants). Although there is, naturally, room for improvement in certain areas, the website nonetheless enables unprecedented access to these important materials, and its launch was hailed as a significant milestone in the Árni Magnússon Institute's efforts to make its collections more accessible to researchers and the general public alike.

26 At the time of writing, only approximately one-quarter of the toponyms recorded in the archive have been given GIS coordinates and are entered in the Landmælingar Íslands database.

27 The website and the data are published under a CC-BY 4.0 licence. This is in line with the open-access implementation policy adopted by the Árni Magnússon Institute for Icelandic Studies (see further <https://arnastofnun.is/is/stefna-um-opinn-adgang-og-opin-gogn>), itself part of the “opin gögn” (open data) policy (<https://opingogn.is>) and the “opin vísindi” (open science) policy (<https://opinvisindi.is>) supported by the Icelandic government. Landmælingar Íslands is a leading open-access data provider in Iceland, having taken steps to implement the European Commission's INSPIRE Knowledge Base regarding infrastructure for spatial information in Europe (see <https://inspire.ec.europa.eu>; accessed May 9, 2021), and following Open Geospatial Consortium standards (www.ogc.org; accessed May 9, 2021). See details at <https://leidbeiningar.lmi.is/opin-gogn-lmi> (accessed May 9, 2021).

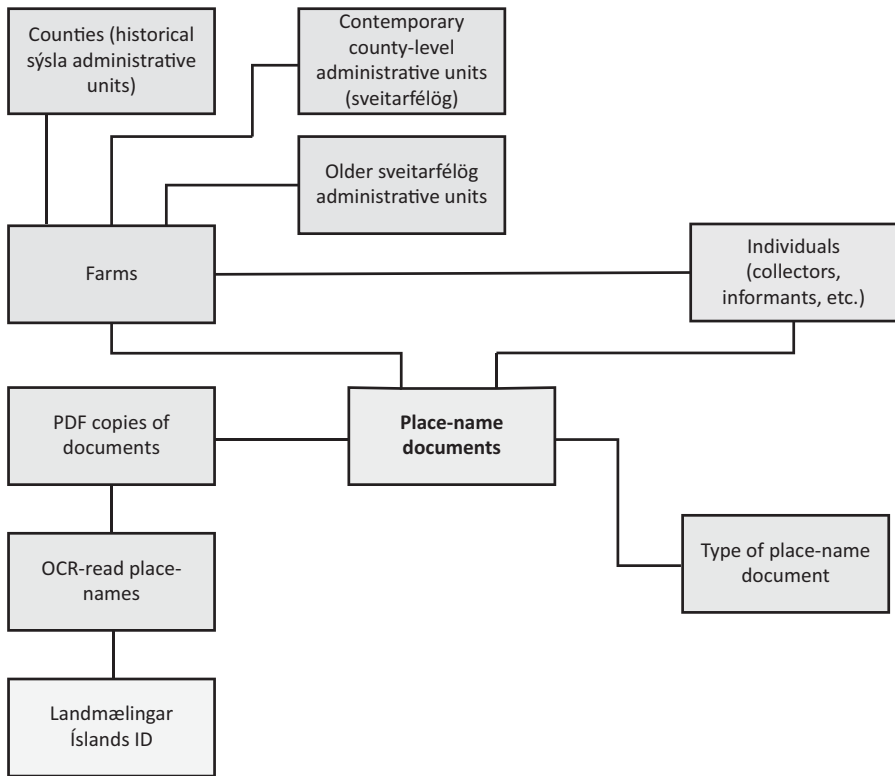


Figure 3.3. Entity relationship diagram of Nafnið.is backend.

Image by Pétur Húni Björnsson and Emily Lethbridge.

Case Study: Grettir Ásmundarson and His Place in the Icelandic Landscape

In this case study, *Grettis saga Ásmundarsonar* (*The Saga of Grettir Ásmundarson*) has been selected to demonstrate some of the ways that the two spatial data tools under focus here, ISM and Nafnið.is, might be utilized in tandem to explore the narrative and its place in the Icelandic landscape, past and present, from a spatial perspective.

Grettis saga and Icelandic Saga Map

The action of *Grettis saga* takes place for the most part in the tenth century and early eleventh century, though, in the largely stable version that is preserved in extant manuscripts, it is thought to have been written in the fourteenth century. The main narrative of *Grettis saga* tells the story of how Grettir, the most famous of all Icelandic outlaws, was sentenced to outlawry but survived, on the run, around Iceland for nearly 20 years. Before Grettir is introduced to the story, something of his family history is told, including the circumstances of his grandfather's emigration from Norway to Iceland.

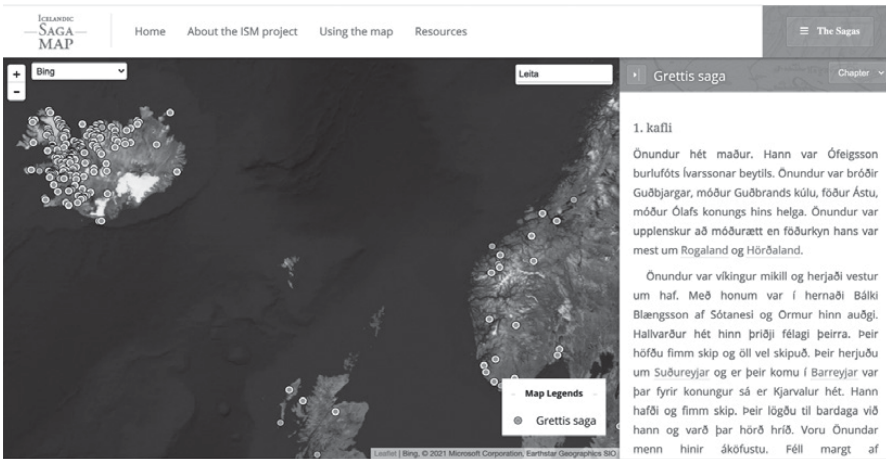


Figure 3.4. Screenshot of Icelandic Saga Map showing geographical places named in *Grettis saga*. Image by Emily Lethbridge.

Selecting *Grettis saga* on the ISM website brings up all the point data associated with it (that is, all the place-names that it was possible to geo-reference), and we have a clear picture of how this narrative is spatially situated or anchored (see Figure 3.4, a screenshot of ISM that shows geographical places named in *Grettis saga*). Iceland is, unsurprisingly, the geographical focus point of the narrative, but places elsewhere in Scandinavia and even beyond are part of the narrative too; Grettir's death, related at the end of the saga, is avenged by a brother in Constantinople, as already noted above. From this visualization, something of an insight into the worldview of medieval Icelanders can be extrapolated: we get a sense of places beyond Iceland that saga audiences would be familiar with, on the basis of their mention in saga narratives at least.

Querying the data in the ISM database, we can do more than just look at where action in *Grettis saga* takes place. The total number of places named in *Grettis saga* with spatial coordinates in the database is 286; these places are mentioned on 519 occasions.²⁸ Of all the places that are geo-referenced, those that are mentioned most frequently over the course of the narrative are 1) Bjarg (nineteen references), 2) Norway (sixteen references), 3) Drangey (fourteen references), 4) Iceland (thirteen references), and 5) Borgarfjörður (nine references). The data thus give us a quantitative basis on

²⁸ Note that a manual count of places in *Grettis saga* in the index of the Íslensk fornrit edition gives 292 place-names (including, e.g., names of thing sites, country names, area names); a handful of places have not made it into the ISM database on the grounds that GIS coordinates could not be decided. It is worth making the point that, here (and elsewhere in the discussion), figures given for numbers of place-names, etc., will always be somewhat uncertain, not least because of variation between manuscript witnesses of the same saga, for example, or later editorial interventions or decisions.

which to back up assumptions regarding the places that are of greatest importance, or have the greatest prominence, in the narrative. From reading the saga, it comes as no surprise that Bjarg, Grettir's birthplace and family farm, should be the place that is named most often. Movement between Norway and Iceland is a key dynamic of the saga too—both in the early part, which describes Grettir's grandfather's emigration from Norway to Iceland, and in Grettir's own story, which includes travel to Norway from Iceland, and back (it is in Norway that the event leading to his sentence as an outlaw occurs: the accidental burning of a group of merchants in a hall). Drangey is the island in Skagafjörður in northern Iceland where Grettir spends the last three years of his life, before he is killed there by his enemies; Borgarfjörður is a region in the west of Iceland where Grettir spends time in hiding—under the protection of Björn in Hítardalur, for example, and in adjoining highland areas such as Arnarvatnsheiði.

Since every place-name entered into the database has a place type associated with it, we can also query the data to establish the types of place that are most common, and least common.²⁹ We find that, of the 286 discrete places that are named in *Grettis saga*, 102 are farms (mentioned on 186 occasions in total); forty-one are regions or large areas (such as Borgarfjörður, mentioned on sixty-seven occasions); eighteen valleys are named (mentioned on twenty-nine occasions); seventeen fjords (mentioned on forty-one occasions); eleven rivers (mentioned on fifteen occasions); ten islands (mentioned on twenty-nine occasions); eight harbours (mentioned on twelve occasions); eight countries (mentioned on thirty-eight occasions); seven hills (mentioned on eight occasions); seven assembly sites (mentioned on eleven occasions) ... and so on. Conclusions drawn on the basis of these figures will inevitably be subjective to some degree, not least since the place type framework adopted for the ISM data was created on an ad hoc basis and not extrapolated from any existing ontology, such as CIDOC-CRM or Historic Landscape Characterisation.³⁰ In addition, the figures need to be taken as a guide suggesting trends rather than as absolute, not least on account of human fallibility, as well as because of differences between extant manuscript witnesses of any given saga, and, equally, between different editions of a saga. Nonetheless, together with qualitative readings of the saga, the varying proportion of different place types that occur in the *Grettis saga* narrative might be seen to constitute the saga's unique "topographical stamp" or topographical signature. We might not need data to tell us that *Grettis saga* takes place over a wide geographical area (hence a large number of farms),

²⁹ The place types are not exhaustive and were identified in the early period of working on the project. They are, broadly speaking, divided into three categories: place types or landscape features associated with human settlement or landscape intervention (e.g., farms, outbuildings, fields, etc.); natural features (e.g., hills, moors, bodies of water, etc.); and political or administrative units of varying sizes (e.g., administrative areas and also countries). A useful future refinement would be to standardize the place types so that they are in line with, e.g., the place types used by Landmælingar Íslands in its database (see www.lmi.is/static/files/ornefni/birtingarflokkar-list_100120_bg.pdf; accessed May 9, 2021).

³⁰ See www.cidoc-crm.org and <https://historicengland.org.uk/research/methods/characterisation/historic-landscape-characterisation> (both accessed May 9, 2021).

nor the fact that Grettir's many years as an outlaw probably constitutes one explanation for the many regions or local areas that features in the narrative, for example. But there may well be something more in such patterns or characteristics: is eleven rivers a high number of rivers on average for a saga in this corpus? Or eight harbours? Or ten islands? Concurrently, what place types appear only rarely, or not at all? Significant patterns might conceivably be seen more clearly, too, if the equivalent data for other sagas were to be analyzed in the same way alongside the *Grettis saga* data. This is something for a later paper, however.

I will turn now to look at a subgroup of toponymic data derived from *Grettis saga* that provides a link to the next question to be considered as part of this case study: that of the transmission of the saga in the context of the landscape. This dataset comprises twenty-six place-names mentioned in the saga for which etymologies (folk etymologies in some but not necessarily all cases) are provided. These etymologies are either explicit (i.e., the toponym is said to have arisen on account of a character's involvement in a specific event that is recounted in the saga narrative itself) or implicit (i.e., when an anthroponym that forms part of a compound toponym is attached to a character in the narrative said to live at the place in question).³¹ In total, there are fifteen examples of the latter category of place-names, whose origins are implicitly assumed to be associated with a character who appears in a narrative context in the saga. These are:

- *Bálkastaðir* (farm associated with Bálki; chap. 5);
- *Ófeigsstaðir* (farm associated with Ófeigur; chap. 6);
- *Prándarholt* (farm associated with Prándur; chap. 6);
- *Grettisgeil* (path associated with Ófeigur Grettir; chap. 10);
- *Ingólfsfjörður* (fjord associated with Ingólfur; chap. 11);
- *Eyvindarfjörður* (fjord associated with Eyvindur; chap. 11);
- *Ásmundargnúpur* (mountain/farm associated with Ásmundur; chap. 13);
- *Torfustaðir* (farm associated with Skáld-Torfi; chap. 15);
- *Auðunarstaðir* (farm associated with Auðunn; chap. 15);
- *Ásgeirsá* (farm associated with Ásgeir; chap. 15);
- *Böðvarshólar* (farm associated with Böðvar; chap. 30);
- *Þórhallsstaðir* (farm associated with Þórhallur; chap. 32);
- *Hjaltadalur* (valley associated with Hjalti; chap. 70);
- *Höfðaströnd* (coastal area associated with Höfði; chap. 70);
- *Steinsstaðir* (farm associated with Steinn; chap. 70).

The origin of the place-name Drangey ("rock-stack island") is implicitly suggested in its appearance, as described to Grettir by his uncle in chapter 67. A further ten place-names that are mentioned in the saga are accompanied by explicit etymological anecdotes

³¹ All these place-names are geo-referenced and can be searched for on the ISM website map interface.

(as per the first etymological category described above); here, the action described in the saga is directly commemorated in the landscape in specific toponyms. These toponyms are:

- *Tréfótshaugur* ("tree-leg's mound," a burial mound where Grettir's grandfather Önnundur tréfótur is said to have been buried; chap. 11);
- *Grettishaf* ("Grettir's lifted stone," a stone that Grettir lifts up from the ground to demonstrate his strength, and that subsequently bears this name; he does this on three separate occasions in the saga, in three different places; chaps. 16, 30, 59);
- *Spjótsmýri* ("spear-mire," a bog where Grettir is said to have lost his spear; chap. 49);
- *Grettisoddi* ("Grettir's point," a spit where Grettir fought a battle; chap. 60);
- *Þórisdalur* ("Þórir's valley," a valley that Grettir names after the giant, Þórir, who lives there; chap. 61);
- *Hæringshlaup* ("Hæringur's leap," a cliff on Drangey off which a man called Hæringur jumps; chap. 76);
- *Grettisbúr* ("Grettir's pantry," a shed in which the man who kills Grettir, Þorbjörn öngull, keeps Grettir's severed head, preserved in salt; chap. 82);
- *Grettisþúfa* ("Grettir's hummock," a mound somewhere in the elevated Stórisandur highland area where Þorbjörn öngull abandons Grettir's head and buries it; chap. 84).

These ten places are all in the west and north of Iceland, with one cluster in Hrútafjörður (where Grettir was born), another cluster in the north on Drangey (where Grettir was killed) and the nearby mainland (where his body was taken to), and a third cluster in Hítardalur (where Grettir hid out for some years with the help of a friend). Other single points are in the Strandir area of the West Fjords, where Grettir's paternal grandfather settled and was buried, and north of the Þingvellir national assembly site; two other points are in the western part of the Icelandic highlands. It is perhaps not surprising that these explicit etymological anecdotes are attached to place-names that are themselves near significant places in the saga and in Grettir's life, according to the saga narrative. These places may well have had a special resonance in oral tradition: orally transmitted tales about Grettir were probably passed down from one generation to the next until the time came when these tales were combined into a written whole. Ultimately, though, it is not possible to know when these ten place-names came into existence and whether or how much they pre-date the composition date of the saga itself in the textual form that we know it (believed to be in the late thirteenth, or even fourteenth, century).³² The processual nature of the relationship between these narratives (in their oral form, which we can only guess at, and also in their written

³² For discussion about the age, place of composition, and authorship of the saga, see Guðni Jónsson's Íslensk fornrit edition of *Grettis saga* at lxviii–lxxv. Guðni Jónsson (xlvi, n1) notes that the saga itself indicates that the place-name Spjótsmýri (ON: Spjótsmýrr) did not come into existence before the late thirteenth century: the saga records how the spear was found in the latter years of Sturla Þórðarson's life (1214–1284).

forms) is one of the most fascinating aspects of a spatial-data-based approach to the saga corpus. Place-names were clearly an important source for saga-writing: in the course of creating sophisticated, literary written works, authors and/or scribes drew on toponymical etymologies that in many cases may have circulated previously in oral tradition, but nonetheless have been “invented” at a time later than that to which they purport to date according to their saga narrative context. The Icelandic landscape and individual topographical features gave rise to saga narratives: anecdotes were drawn out of the landscape and commemorated in it. Even once the sagas were written down, the landscape still played a vital role in transmitting the stories, which were worked out in detail on parchment.³³

The final set of data that we can extract from the ISM database and query is information about manuscripts that preserve texts of *Grettis saga*, and the places around Iceland these manuscripts have been associated with from the time of their production until their accession into the collections in which they are held today. On the basis of the large number of parchment and paper manuscripts in which *Grettis saga* is preserved—as well as the evidence of various poetic rewritings of the narrative, such as those in the *rímur* form, for example—it can be assumed that *Grettis saga* has always been among the most popular *Íslendingasögur* in Iceland from the medieval period to modern times.³⁴ In an article published in 2000, Guðvarður Már Gunnlaugsson provided a detailed survey of *Grettis saga* manuscripts, counting fifty-eight in total. Of these fifty-eight, three are parchment manuscripts from the fifteenth century; two are parchment manuscripts from the sixteenth century; twenty-seven are paper manuscripts from the seventeenth century; twenty-one are paper manuscripts from the eighteenth century; and five are paper manuscripts from the nineteenth century.³⁵ Information about each of these fifty-eight manuscripts was added to the ISM database. As well as the manuscript shelfmark and contents (i.e., other sagas or other texts), individuals who are known to have been associated with respective manuscripts are catalogued (with a note made of their role where known—i.e., scribe, owner, borrower, etc.), together with geographical places or areas associated with the manuscripts (i.e., place of production, where known; or places where they were kept under the ownership of known individuals). The information was gathered from several sources: Handrit.is was the main source, but other printed catalogues for collections that hold Icelandic manuscripts were consulted when necessary, as well as published scholarship such as (in the case of *Grettis saga*) the aforementioned article by Guðvarður Már Gunnlaugsson.³⁶

³³ See further Lethbridge, “The Icelandic Sagas and Saga Landscapes.”

³⁴ See Hastrup, “Tracing Tradition,” on *Grettis saga* and its popularity in Iceland from medieval to modern times; see also Guðvarður Már Gunnlaugsson, “Grettir.”

³⁵ Guðvarður Már Gunnlaugsson, “Grettir,” 61.

³⁶ See <https://handrit.is> (accessed May 9, 2021). Handrit.is is the online catalogue for Icelandic manuscripts kept in major collections at the Árni Magnússon Institute for Icelandic Studies, Reykjavík; the National and University Library of Iceland, Landsbókasafn Íslands – Háskólabókasafn;

From the information collated thus far, around fifty places have been identified that are associated with extant manuscripts preserving a text of *Grettis saga*. The majority of these places are in Iceland but some locations associated with manuscripts are elsewhere in Scandinavia (Copenhagen, Uppsala, Stockholm, Bergen, Oslo), Britain (London, Oxford), and Germany (Rostock), for example.³⁷ For all manuscripts, the place where they have ended up (i.e., the geographical location of the collection in which they are preserved) is known. Often, however, the place of origin and/or the locations of other places where manuscripts were kept or owned (i.e., geographical information relating to their subsequent provenance) may be only partially known. In general, more information is available regarding where post-medieval Icelandic paper manuscripts were produced, since scribes often provided their name and noted the place and date of writing in a colophon in these copies. With only a very few exceptions, such scribal colophons are not found in medieval parchment manuscripts, and thus other evidence (primarily paleographical) must be marshalled to ascertain place and date of production. Information about provenance—who owned a manuscript after its production, and where they kept it, for example—is sometimes gleaned from ownership inscriptions or other marginalia. The overall picture regarding the geographical distribution of places where manuscripts were produced and later kept or owned is thus uneven, especially with regard to the older, parchment manuscripts. But, even allowing for incompleteness, map-based visualizations of the data that can be gathered still have the potential to help identify trends and patterns concerning the production and dissemination of saga texts, such as varying regional interest in one or other saga over time.

Exporting the data into an online custom base map program such as Google Maps, for example, we can sort and display the spatial data according to century, place of origin, and final place, as well as seeing multiple places associated with a selected manuscript, which gives us an idea of how far and where this particular manuscript has travelled over its lifetime (see Figures 3.5 to 3.8).³⁸ A detailed analysis of the data and discernible patterns is beyond the scope of this chapter, but it is interesting to note tendencies such as the fact that most manuscripts containing *Grettis saga* are associated with locations in the northwest and north of Iceland (the West Fjords, Skagafjörður, Eyjafjörður), with another cluster in the southwest. Hardly any manuscripts with *Grettis saga* texts seem to have been in circulation in eastern Iceland, at least on the basis of the evidence available. Further avenues for analysis emerge when the manuscript data for *Grettis saga* are combined with data for places named in the saga: the spatial data can help us to identify the cases in which manuscript scribes and/or owners were copying and reading *Grettis saga* in, or very near to, key places in the saga narrative itself—i.e., in the north,

and the Arnarnagæan Institute repository, Department of Nordic Studies and Linguistics, University of Copenhagen.

37 Yet more manuscript witnesses of *Grettis saga* may be among Icelandic manuscripts that ended up in private or local collections in North America, having travelled west with Icelanders who emigrated in the nineteenth and early twentieth centuries. See Parsons, “Albert Jóhannesson.”

38 See <https://google.com/maps> (accessed May 9, 2021).



Figure 3.5. Screenshot of Google MyMaps interface showing geographical places associated with *Grettis saga* manuscripts, organized by manuscript shelfmark. Image by Emily Lethbridge.



Figure 3.6. Screenshot of Google MyMaps interface showing geographical places associated with *Grettis saga* manuscripts, organized by date of manuscript. Image by Emily Lethbridge.

where Grettir was born and died (see Figure 3.9). We might reasonably expect that, in these areas, oral traditions about Grettir would have been more widespread. The idea, too, that people might have read aloud from a manuscript containing *Grettis saga* on a farmstead that is named in the saga itself gives rise to a certain suggestion of resonance, with narrative and local landscape fusing together. In this respect it is perhaps not surprising that significantly fewer manuscripts are associated with places in the east since this part of the country plays only a minimal part in the narrative. Being able to

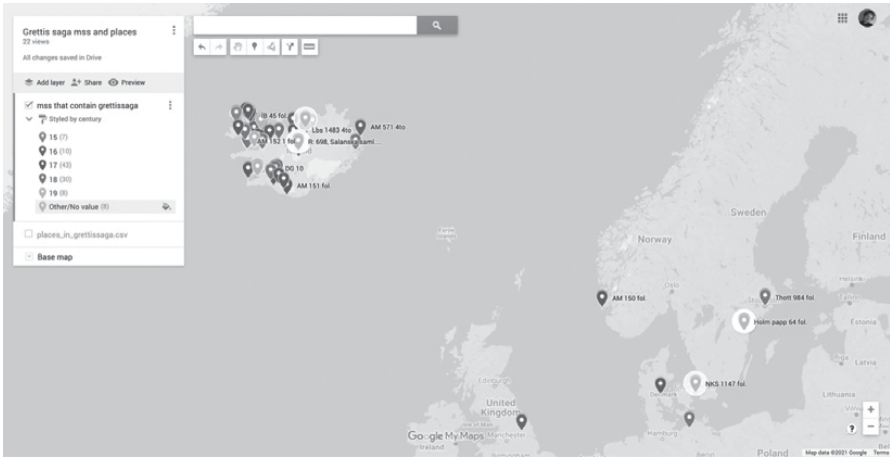


Figure 3.7. Screenshot of Google MyMaps interface showing geographical places associated with *Grettis saga* manuscripts, organized by date of manuscript and showing manuscript locations outside Iceland. Image by Emily Lethbridge.

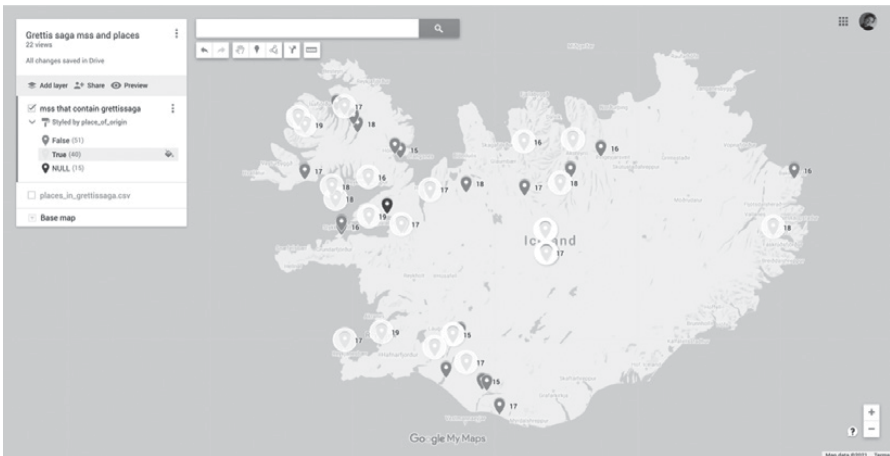


Figure 3.8. Screenshot of Google MyMaps interface showing geographical places associated with *Grettis saga* manuscripts, organized by place of origin (true/false). Image by Emily Lethbridge.

combine data about places named in the *Grettis saga* narrative with places where the narrative was physically consumed (whether read aloud directly from the manuscript, extemporized orally with the manuscript as a prop, or read silently, as examples of three possible scenarios) opens up the possibility for more granular, case-study-based considerations of the saga's literal dissemination in the physical (but also culturally constructed) landscape.

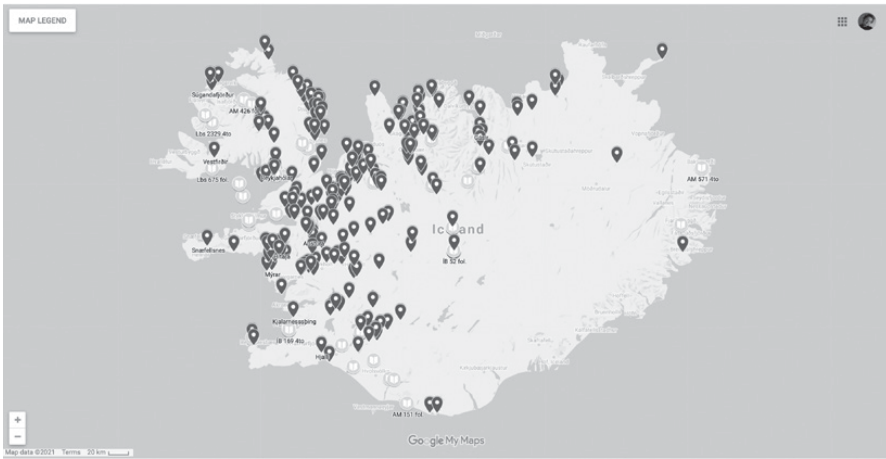


Figure 3.9. Screenshot of Google MyMaps interface showing geographical places associated with *Grettis saga* manuscripts and geographical places named in *Grettis saga*. Image by Emily Lethbridge.

***Grettis saga* and Nafnið.is**

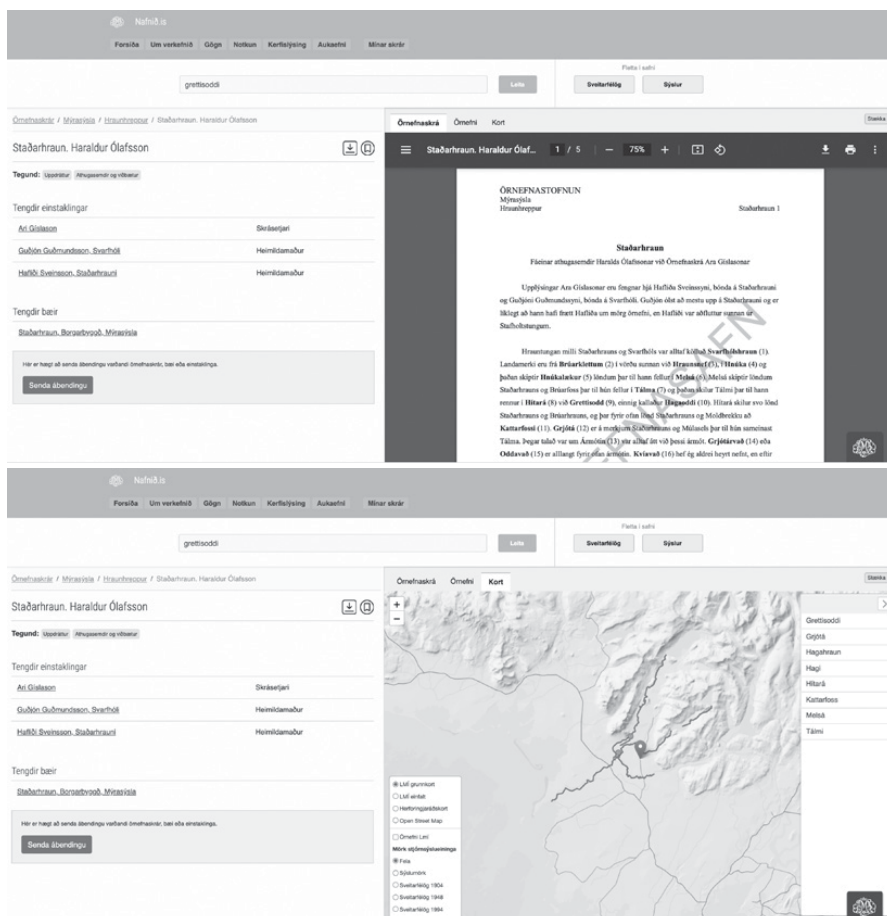
Turning to Nafnið.is, there are two simple methods to see the spatial data associated with Grettir Ásmundarson that is present in documents preserved in the place-name archive at the Árni Magnússon Institute for Icelandic Research. The first way involves searching for place-names that preserve the name “Grettir,” by entering a search for “Grettis*,” for example, to see what results are returned.³⁹ The second way involves selecting documents for key farms or other places named in the saga and reading through these records, looking for references to the saga and to place-names associated with saga characters and/or events. As already noted above, there are several place-names in the saga itself whose etymological origins are explicitly associated with Grettir and his personal name: Grettisoddi, Grettisbúr, Grettisþúfa, and three separate examples of Grettishaf. In what follows, I focus on these place-names and trace them in the place-name records, hoping to illustrate how these records correspond with, and make references to, the saga itself—or not, as the case may be.

Grettisoddi

“Grettisoddi” is recorded in two documents: one for the farm Staðarhraun in Mýrasýsla, and the other for the neighbouring farm Hagi. The Staðarhraun record was put together by a certain Haraldur Ólafsson as a supplement to an older document for Staðarhraun compiled by the place-name collector Ari Gíslason in the 1960s; it adds to the place-names recorded by Ari and gives extra context and description (see Figure 3.10 (a)).⁴⁰

³⁹ Note that the asterisk enables a search of all place-names beginning with whatever precedes it.

⁴⁰ See <https://nafnid.is/ornefnaskra/15915> for the younger Staðarhraun record and <https://nafnid.is/ornefnaskra/15914> for Ari’s older record (both online records accessed May 9, 2021).



Figures 3.10 (a) and (b). Screenshots of Nafnið.is interface showing the place-name record for Staðarhraun and location of toponyms in the record (e.g., Greittisoddi) that have been given geographical coordinates. Images by Emily Lethbridge.

In Haraldur's record, the location of Greittisoddi is described as being where the river Tálmi runs into the river Hítará (see Figure 3.10 (b)); Greittisoddi is apparently also known by the name "Hagaoddi," according to Haraldur. The record for Hagi was compiled by Ari on the basis of information from the same informants as for Staðarhraun. In it, "Greittisoddi" is named in the context of describing a grassy, low-lying area south of the farm, variously known as "Hagaoddi," "Greittisoddi," or "Orrustuoddi" ("Battle spit"). This source notes that the last name (i.e., Orrustuoddi) must be the more "correct" one, since it was here that Grettir fought against the men from the district of Mýrar.⁴¹

⁴¹ The place-name record is online at <https://nafnid.is/ornefnaskra/15807> (accessed May 9, 2021). The Icelandic note reads: "Suður frá bæ tekur svo við láglendi allmikið og grasi vaxið svæði.

Grettisbúr

A search for Grettisbúr, said in the saga to be on the estate of the farm of Viðvík in Skagafjörður, north Iceland, returns no results in Nafnið.is. No reference to the place-name could be found in other written sources, confirming the assumption that it has disappeared from the used toponymicon, although it is not possible to say whether this might have happened in the medieval period or at some later point in time.⁴² When the Danish philologist Kristian Kålund (1844–1919) was in the area in the 1870s, conducting the historical-topographical research that was published in 1882 under the title *Bidrag til en historisk-topografisk Beskrivelse af Island*, he drew a blank, although he did note that a certain stone near one of the Viðvík outbuildings was said to mark the burial place of another character in the saga: the witch and foster-mother of Grettir's enemy, Þorbjörn öngull, the farmer of Viðvík.⁴³ This oral tradition is found in one of the documents for Viðvík in the place-name archive. The record in question is a document compiled by a certain Björn Jónasson at the behest of Margeir Jónsson (1889–1943) a place-name collector who worked extensively at amassing records in the north of Iceland on behalf of the place-name division at Þjóðminjasafn Íslands. In a footnote, Björn notes that, when he was around twenty years old, he had heard an old man who lived at Viðvík as a child, and who died around 1925, say that near the dairy, there was once a small hill or mound believed to be the grave of this malevolent female character. *Grettis saga* describes how this woman uses magic to bring about the circumstances that lead to Grettir's death. Moreover, according to Björn's account, the spot was thought to be haunted or cursed, and the old man had once seen a small and evil-looking old woman by the mound, though Björn could not remember the details of her dress as they were given to him then, apart from that she had some kind of a dark head-dress and big horn buttons on a black outer garment.⁴⁴

Þetta hefur verið nefnt ýmsum nöfnum, Hagaoddi (18), Grettisoddi (19) eða Orrustuoddi (20), og mun það nafn vera það rétta. Þar barðist Grettir við þá Mýramenn" ["To the south of the farm is a big stretch of low-lying land and a grass-covered area. This has been known by several names, Hagaoddi (18), Grettisoddi (19) or Orrustuoddi (20), and this latter name must be the correct one. It is there that Grettir fought with the men from Mýrar"].

⁴² Other Icelandic sources checked include the corpus of medieval charters (Íslensk fornbréf), Árni Magnússon and Páll Vídalín's *Jarðabók* from the early eighteenth century, Eggert Ólafsson and Bjarni Pálsson's *Ferðabók* from the mid-eighteenth century, and Sveinn Pálsson's *Ferðabók* from the late eighteenth century.

⁴³ Kålund, *Íslenskir sögustaðir*, 3:59.

⁴⁴ The place-name record is online at <https://nafnid.is/ornefnaskra/18960> (accessed May 9, 2021). The Icelandic text reads as follows: "Þegar ég var um títugt, heyrði ég gamlan mann, sem í æsku dvaldi í Viðvík, Rögnvald Jónasson á Þröm, d[áinn] um 1925?, segja frá því, að örfáa faðma frá fjósinu hefði verið lítill hóll eða stór þúfa og gamlir menn hefðu sagt, að þar væri dysjuð föstra Þorbjarnar önguls (sjá Grettissögu), er drap Gretti með gjörningum. Voru þúfur þar í kring og sagði karl, að reimleikaorð hefði legið á þessum stað. Einu sinni kvaðst hann hafa séð þar kerlingu (hjá hólum), lága vexti, en afar gildvaxna, með stóra, dökka skuplu á höfði og ófríða og illilega á svipinn. Hann lýsti búningi hennar að nokkru, en ekki man ég þá lýsingu með vissu, nema stórir hornhnappar voru í sauðvartri utanhafnarspör, sem hún var í."

Grettisþúfa

Grettisþúfa (the spot where Þorbjörn öngull abandoned Grettir's head in chapter 84 on his way to the Alþingi) is said in the saga to be somewhere in the elevated highland area known then as "Sandur" (and today as "Stórisandur"), north of Langjökull in west Iceland, across which lay the old Skagfirðingavegur route between districts. While no spot with this name has been recorded as identifiable in the past couple of centuries or so, and possibly earlier (as with Grettisbúr, it is not possible to ascertain when the place-name fell out of use), some have suggested that the landmark known as Grettishæð may be the feature to which the earlier Grettisþúfa referred.⁴⁵ A document by Björn Bergmann recording Stórisandur place-names (just under eighty in total) in the place-name archive makes this assertion ("mun vera sami staður og nefndur er Grettisþúfa í Grettissögu" ["must be the same place as that which is called Grettisþúfa in *Grettis saga*"]).⁴⁶ A search for "Grettisþúfa" in Nafnid.is, however, does come up with a result, though in the place-name record for the farm of Bjarg.⁴⁷ Compared with some place-name records, this document is short and there is no context or explanation for the name "Grettisþúfa" here, though other sources (including the oral source of the current farmer) assert that the name marks the spot in the homefield at Bjarg where Grettir's head was eventually buried. Chapter 84 of the saga states that Grettir's head was buried at Bjarg by the church there; no church remains on the site today. The spot was protected in law in 1931 by Matthías Þórðarson, head of Þjóðminjasafn Íslands and in charge of Icelandic antiquities at the time, and it has never been excavated. When I interviewed the present farmer in 2011, he said that bad consequences would ensue if the spot was interfered with; this sounds like a modern articulation of the widespread Icelandic folktale belief whereby certain patches known as "álagablettir" have a curse on them, and ill events come to pass if they are mowed or dug into.

Grettishaf

In the place-name record for Bjarg mentioned above, there are three references to large rocks that each have the name "Grettistak" ("Grettir's take/lift"). The saga does not mention these particular rocks in any context, though it does refer to three other boulders in other areas that Grettir lifts to prove his strength and to entertain himself. According to the saga, each of these three boulders is given the name "Grettishaf" after Grettir has performed his feat of strength, and the saga locates one by the Sleðaás ridge, near Þingvellir in southwest Iceland, where Grettir stops with others to eat before riding north after the Alþingi (chap. 16); the second at Hrítafjarðarháls in northwest Iceland, not very far from Bjarg (chap. 30); and the third on the mountain Fagraskógarfjall in west Iceland, where Grettir hides out for a time in the west of the country (chap. 59).

⁴⁵ Geographic coordinates for Grettishæð: N 65° 3' 24" W 19° 58' 33", taken from the LMÍ online map interface, <https://kortasja.lmi.is/mapview/?application=kortasja> (accessed May 9, 2021).

⁴⁶ See <https://nafnid.is/ornefnaskra/18002> (accessed April 25, 2022). See also *Grettis saga*, 268n1.

⁴⁷ See <https://nafnid.is/ornefnaskra/25072> (accessed May 9, 2021).

Several instances of “Grettishaf” come up when the name is queried in Nafnið.is. In records for Þingvellir, however, a “Grettistak” is recorded but no “Grettishaf.”⁴⁸ Similarly, no “Grettishaf” is documented in records that cover the area around the Hrútafjarðarháls ridge, but a “Grettistak” is located on the ridge.⁴⁹ In a record for the nearby farm of Þóroddsstaðir, the stone is mentioned in the context of a description of the area and landmarks near the old route over the ridge.⁵⁰ The large stone is said to be in the east of the Sandhólahraun lava field: “[T]his stone is known from *Grettis saga*, and Grettir is supposed to have lifted it. Sigfús Jónsson estimates the stone to weigh about ten tons, and it lies on a smooth whaleback rock base, in such a way that its two corners rest on the base and another little stone is wedged underneath it. This is a very unusual position and it is unbelievable that Grettir lifted this stone.”⁵¹ The record for another nearby farm, Sveðjustaðir, also mentions the “Grettistak” and states explicitly that it marks the boundary between the two farms of Þóroddsstaðir and Sveðjustaðir.⁵²

Finally, in the place-name records for Hítárdalur, where Fagraskógarfjall is, no “Grettishaf” (or “Grettistak”) is recorded, though Kristian Kålund notes the presence of a large stone or cliff “that is [the] Grettishaf named in the saga” under the mountain, on a sandy strip of land near the road.⁵³ The name “Grettisbæli” (“Grettir’s lair”), on the other hand, is recorded in the place-name documents, as, for example, in a record for Hítárdalur.⁵⁴ *Grettis saga* describes how Björn Hítárdalskappi, a chieftain in the valley, suggests Grettir hides in a concealed place up on the mountainside, and Grettir lives there for three years: it’s a strategically good place, according to Björn in the saga, and he refers to it as a *bæli*, or an animal’s lair or bird’s nest.⁵⁵ In one of the place-name

48 See <https://nafnid.is/ornefnaskra/24648> (accessed April 25, 2022). See also <https://ferlir.is/grettistak-undir-sledaasi> (accessed May 9, 2021) for discussion about attempts to locate the stone.

49 Geographic coordinates for Grettistak: N 65° 14′ 31″ W 21° 0′ 50″, taken from the LMÍ online map interface, <https://kortasja.lmi.is/mapview/?application=kortasja> (accessed May 9, 2021).

50 The place-name record for Þóroddsstaðir is online at <https://nafnid.is/ornefnaskra/25063> (accessed May 9, 2021).

51 The Icelandic in the place-name record for Þóroddsstaðir (link in previous footnote) reads: “Norðan við Skútadrög eru þrír hólar hver austur af öðrum, Lestarmannahólar (33), en eftir þeim lá gamli vegurinn yfir Hrútafjarðarháls. Austur af Lestarmannahólum tekur við stór urð, kölluð Sandhólahraun (34), og austarlega í því er stór steinn, nefndur Grettistak (35), á merkjum. Steinn þessi er þekktur úr Grettissögu, og á Grettir að hafa fengist við hann. Sigfús Jónsson áætla, að steinninn sé um 10 tonn að þyngd, og hvílir hann ofan á hvalbaki, þannig að tvö horn hans standa niður úr og annar lítill stein er skoraður undir hann. Er þetta mjög óvenjuleg staða og ótrúlegt, að Grettir hafi ráðið við steinninn.”

52 The place-name record for Sveðjustaðir is online at <https://nafnid.is/ornefnaskra/25166> (accessed May 9, 2021).

53 Kålund, *Íslenskir sögustaðir*, 2:50.

54 Online at <https://nafnid.is/ornefnaskra/15847> (accessed May 9, 2021).

55 The description in *Grettis saga* is in chapter 58. The Icelandic text reads: “Björn mælti: ‘At því hefi ek hugað at í því fjalli, sem fram gengr fyrir útan Hítará, mun vera vígi gott ok þó fylgsni, ef klóklega er um búit. Er þar bora í gegnum fjallit, ok sér það neðan af veginum, því at þjóðgatan liggir

records for the nearby farm of Moldbrekka we find the note that “east of the farm up under Grettisbæli are some level grassy areas called Sandengi. Above Sandengi ... is a very high hill that comes out of the mountain and Grettisbæli is at the top of this. This whole mountain is now called Grettisbæli. People who have climbed up to Grettisbæli have told me that it looks different today to the description in *Grettis saga*.”⁵⁶

Other Grettis- toponyms in the place-name archive

A search for “Grettisbæli” in Nafnid.is brings up examples of this place-name in other areas. Indeed, when a search for “Grettis*” is input, approximately 150 or so results are returned. As well as the many examples of “Grettistak/tök” (more than fifty) and “Grettishaf” (around ten), other names include “Grettisdý,” “Grettisflói,” “Grettisgeil,” “Grettisgjá,” “Grettisgluggi,” “Grettishagi,” “Grettishella,” “Grettishjalli,” “Grettishlaup,” “Grettishóll,” “Grettishryggur,” “Grettishylur,” “Grettiskista,” “Grettisklettur,” “Grettiskví,” “Grettislaug,” “Grettislág,” “Grettisleiði,” “Grettislækur,” “Grettismýri,” “Grettisreitir,” “Grettisskarð,” “Grettisskáli,” “Grettissker,” “Grettisskriða,” “Grettisskyrta,” “Grettisspor,” “Grettissteinn,” “Grettisstillur,” “Grettisstrengur,” “Grettistangi,” “Grettistjörn,” and “Grettisvarða.”⁵⁷ Guðvarður Már Gunnlaugsson notes in his article from 2000 that he came to a rough figure of around 120 place-names associated with Grettir after a loose search, and including twentieth-century names such as “Grettisgata” in Reykjavík, as well as other names related to *Grettis saga* but not containing the element “Grettir-” as the first part of the compound (e.g., “Hallmundarhellir,” “Hallmundarhrauni,” and “Skeggjahola” in Hvítársíða, “Ásdísarlundur” in Miðfjörður).⁵⁸

Without mapping the location of each example returned by the Nafnid.is search, and looking at every record, it is not possible to say how many of these places are explicitly associated with Grettir Ásmundarson. We might of course expect a few of these “Grettir-” place-names not to be connected with him: other individuals naturally bore the personal name “Grettir,” although it has never been a very common name in Iceland.⁵⁹ But one

niðri undir, en sandbrekka svá brött fyrir ofan, at fáir menn munu upp komask, ef einn maðr rþskur er til varnar uppi í þœlinu. Nú lízk mér það helzt ráð ok umtalsmál, at vera þar; því at þaðan er hægt at leita til fanga ofan á Mýrar ok út til sjávar.” Guðni Jónsson, *Grettis saga*, 186.

56 The place-name record for Moldbrekka is online at <https://nafnid.is/ornefnaskra/12679> (accessed May 9, 2021). The Icelandic text reads: “Austur frá bænum og upp undir Grettisbæli (10) eru sléttar grundir kallaðar Sandengi (11). Upp af Sandengi (skerst) gengur mjög hátt fell út úr fjallinu og er Grettisbæli efst í því. Fell þetta er nú orðið kallað Grettisbæli.—Það hafa þeir menn sagt mér, er gengið hafa upp í Grettisbæli, að þar líti nú öðruvísi út en sagt er frá í Grettissögu.”

57 These are almost all landscape features, mostly on a small scale but at varying elevations: gullies, hollows, cliffs, ridges, hills, mounds, spits, streams, cairns, skerries, among other features. “Grettisskáli” (“Grettir’s hall”) is a manmade feature by Arnarvatn, the low, grassed-over foundations of a small building; “Grettisleiði” (“Grettir’s gravemound”) is a small grassy hump on the farm of Fagranes in Skagafjörður where it is said that Grettir’s body was buried.

58 Guðvarður Már Gunnlaugsson, “Grettir,” 50.

59 See, e.g., Guðrún Kvaran, *Nöfn*, 242; Hastrup, “Tracing Tradition,” 168–69.

of the notable things about the relationship between Grettir's story and the Icelandic landscape is precisely how great an inspiration the figure of Grettir seems to have been to Icelanders over time, playing out in their interaction with the landscape and their perception of places through the lens of Grettir, his experiences as an outlaw, and his legendary strength. The proliferation of names for natural features all around Iceland (albeit with a particular concentration in the west and north)—with large glacial erratic boulders in the biggest category—is evidence for the popularity of Grettir and his story beyond the manuscript pages of his written saga from the medieval period onwards, and the popular conception of his greater-than-human stature and ability to stay alive on the run in hostile highland environments where others would not survive. In his discussion of "Grettir-" place-names, Guðvarður Már Gunnlaugsson cites Guðni Jónsson (the editor of the Íslensk fornrit edition of *Grettis saga*), who claimed: "In Iceland, no other figure has as many place-names associated with them as Grettir. The majority of them must be from later times, but some are doubtless older than the saga, such as the Grettisbæli names. The place-names show how Grettir grew in the general consciousness as time passed, becoming a kind of half-troll on the basis of the Grettistak and Grettishlaup place-names, where no human person could have moved [such rocks]."⁶⁰ Similarly, Guðmundur Andri Thorsson wrote: "All around the country are gullies and hills, peaks and stones that bear Grettir's name. If a gully is impassable, a peak unscalable, a stone so large that no-one could lift it, popular tradition immediately attached Grettir's name to it."⁶¹

Mapping meaning

That the figure of Grettir—both in the saga itself and in later popular tradition—is truly larger than life should have become clear in the course of the discussion above. It is not surprising that so many toponyms should be associated with him. But, although other saga characters might not have left quite as deep a footprint as Grettir on the Icelandic landscape, their stories are nevertheless very much traceable and legible in the landscape, just as Grettir's is. Toponyms that commemorate them and their deeds are testament to the active reception of their sagas in the landscape, alongside the act of copying written versions of their narratives from older manuscripts into new ones. The importance of landscape, topographical features, and place-names in the construction of cultural memory has been examined by scholars working within the field of memory studies as well as those within Norse studies.⁶² In the case of the *Íslendingasögur*, the landscape is a key to opening up and understanding the sagas, and, similarly, the sagas are a key to opening up

⁶⁰ *Grettis saga*, lvii–lviii; cited by Guðvarður Már Gunnlaugsson, "Grettir," 49.

⁶¹ "Um allt land eru gljúfur og hæðir, tindar og steinar sem bara nafn Grettis. Sé gljúfur ófært, tindur ókleifur, steinn svo mikill að enginn lyftir virðist alþýða manna umsvifalaust hafa tengt nafn Grettis þar við." Guðmundur Andri Thorsson, "Grettla," 100; also cited by Guðvarður Már Gunnlaugsson, "Grettir," 49–50.

⁶² See, for example, Nora, "Between Memory and History"; Assmann, *Cultural Memory*, 44–45; Hermann, "Memorial Landscapes" and "Saga Literature."

and understanding the landscape, and the dynamic ways in which it has been culturally constructed over time. This picture would be extended yet further with the addition of relevant data drawn from, for example, the folktale record of Iceland as digitized on platforms such as Ísmús.is and Sagnagrunnur, or from other spatial data projects that map medieval Scandinavian textual and material culture, such as the previously mentioned Norse World resource.⁶³

Digital tools, especially those that have a GIS mapping dimension, make it possible to assemble, query, and link or overlay different kinds of data that relate to the literary spaces or geographies of selected narratives, as well as to the “real-world” geographical locations that are associated with these narratives’ transmission and dissemination over time—albeit not without challenges or complications, as discussed above. In the case of the sagas, we are not simply mapping literature, but mapping literature that is inextricably woven together with political, social, economic and environmental history in various ways. Rather than stymying us, though, the technical and intellectual challenges encountered help to sharpen our critical understanding of the nature of the narratives we are interrogating and their place in the culture and society that produced and subsequently consumed them. Beyond this, we are forced to interrogate “what it means to map,” as the editors of a recent volume about literary mapping put it.⁶⁴ Cumulatively, the data allow us to draw up quantitative lines of enquiry as well as qualitative ones, and analysis leads to new nuances, even to new conceptualizations of the relationship between place and story and how this evolved over time. Intertextuality becomes a dominant theme: we become more alert to the spatial signature of individual saga narratives, and how this relates to their transmission history in space and over time, from medieval to modern. What I have attempted to do here in the case study part of this chapter, presenting and analyzing spatial data from the *Grettis saga* narrative as drawn from the ISM database, and combining it with related data in the Nafnið.is database, gives only an idea of what data analytics is capable of revealing. The coming years are sure to be an exciting digital ride for everyone working with spatial data in this field, and it is to be hoped that the collaborative implementation of LOD-driven principles across the community will not only help with sustainability issues for individual projects but will also generate all kinds of new research questions and answers.

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⁶³ See www.ismus.is and <https://sagnagrunnur.com/en> (both accessed May 13, 2021).

⁶⁴ Cooper, Donaldson, and Murrieta-Flores, “Introduction,” 11.

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