



DIGITAL SPATIAL INFRASTRUCTURES AND WORLDVIEWS IN PRE-MODERN SOCIETIES

Edited by

ALEXANDRA PETRULEVICH
and **SIMON SKOVGAARD BOECK**

ARC HUMANITIES PRESS



DIGITAL SPATIAL INFRASTRUCTURES AND WORLDVIEWS IN PRE-MODERN SOCIETIES

COLLECTION DEVELOPMENT, CULTURAL HERITAGE, AND DIGITAL HUMANITIES

Further information and publications:

www.arc-humanities.org/search-results-list/?series=collection-developmentcultural-heritage-and-digital-humanities

DIGITAL SPATIAL INFRASTRUCTURES AND WORLDVIEWS IN PRE-MODERN SOCIETIES

Edited by
**ALEXANDRA PETRULEVICH and
SIMON SKOVGAARD BOECK**

ARCHUMANITIES PRESS

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library.

© 2023, Arc Humanities Press, Leeds



This work is licensed under Creative Commons licence CC-BY-NC-ND 4.0.

The authors assert their moral right to be identified as the authors of this work.

Permission to use brief excerpts from this work in scholarly and educational works is hereby granted provided that the source is acknowledged. Any use of material in this work that is an exception or limitation covered by Article 5 of the European Union's Copyright Directive (2001/29/EC) or would be determined to be "fair use" under Section 107 of the U.S. Copyright Act September 2010 Page 2 or that satisfies the conditions specified in Section 108 of the U.S. Copyright Act (17 USC §108, as revised by P.L. 94-553) does not require the Publisher's permission.

ISBN (HB): 9781641894692

eISBN (PDF): 9781802700794

www.arc-humanities.org

Printed and bound in the UK (by CPI Group [UK] Ltd), USA (by Bookmasters), and elsewhere using print-on-demand technology.

CONTENTS

List of Illustrations	vii
-----------------------------	-----

Introduction

ALEXANDRA PETRULEVICH and SIMON SKOVGAARD BOECK	1
--	----------

PART ONE: DIGITAL SPATIAL INFRASTRUCTURES IN THE HUMANITIES

Chapter 1. Norse World from Plan to Action: Building a Digital Gazetteer of East Norse Medieval Literature Step by Step

ALEXANDRA PETRULEVICH and SIMON SKOVGAARD BOECK	15
--	-----------

Chapter 2. Mapping Saints: Creating a Digital Spatial Research Infrastructure to Study Medieval Lived Religion

SARA ELLIS NILSSON, TERESE ZACHRISSON, ANDERS FRÖJMARK, LENA LIEPE, and JOHAN ÅHLFELDT	33
---	-----------

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	59
-------------------------------	-----------

Chapter 4. TORA: Topographical Register at the Swedish National Archives

OLOF KARSVALL	91
----------------------------	-----------

Chapter 5. Toward Digital Spatiality: Rethinking the World's Largest Place-Name Collection

BJÖRN KARLSSON, KRISTINA NEUMÜLLER, and ELIN PIHL	115
--	------------

PART TWO: BUILDING AND SUSTAINING DIGITAL SPATIAL INFRASTRUCTURES: CHALLENGES AND SOLUTIONS

Chapter 6. Place-Name Databases: A Spatio-Temporal Mess PEDER GAMMELTOFT	137
Chapter 7. Sustainability and Best Practices for Linked Data Heritage Resources: Some Case Studies from Sweden AGNIESZKA BACKMAN and MARCUS SMITH	159
Chapter 8. Integrating Time and Space in a Digital-Historical Administrative Atlas PEDER DAM	185
Chapter 9. A Digital Periegesis: Implementing Spatial Research Infrastructures for Classical History and Archaeology ANNA FOKA, ELTON BARKER, KYRIAKI KONSTANTINIDOU, NASRIN MOSTOFIAN, BRADY KIESLING, LINDA TALATAS, O. CENK DEMIROGLU, and KAJSA PALM	205

PART THREE: THE NORSE PERCEPTION OF THE WORLD: MIEVIAL SPATIALITY IN THE DIGITAL AGE

Chapter 10. Flores Travels to Babylon: <i>Flores och Blanzeflor</i> in Its European Context SOFIA LODÉN	227
Chapter 11. Place-Name Variation in Medieval Literature in the Digital Age ALEXANDRA PETRULEVICH	243
Chapter 12. Nameless Places SIMON SKOVGAARD BOECK	267
Concluding Remarks STUART DUNN	281
Index	291

LIST OF ILLUSTRATIONS

Figures

1.1.	The Norse World system overview.	17
2.1.	Database model of Mapping Saints (simplified). “PK” denotes primary key and “FK” denotes foreign key.	38
2.2.	“PlaceID” 5483, the chapel of the “Holy maid” in Västergötland.....	46
2.3.	“Cult manifestation” #581, illustrating the votive practice associated with a sculpture of St. Lawrence in Landön chapel.	47
2.4.	“Cult manifestation” #2582, a miracle of the Blessed Catherine of Vadstena.....	50
3.1.	Entity relationship diagram of Icelandic Saga Map backend.	62
3.2 (a) and (b).	Screenshots of Landmælingar Íslands maps showing the locations of Kjartanssteinn, Bollalág, and Hafragil according to data in the Landmælingar Íslands database.....	64
3.3.	Entity relationship diagram of Nafnið.is backend.	69
3.4.	Screenshot of Icelandic Saga Map showing geographical places named in <i>Grettis saga</i>	70
3.5.	Screenshot of Google MyMaps interface showing geographical places associated with <i>Grettis saga</i> manuscripts, organized by manuscript shelfmark.	76
3.6.	Screenshot of Google MyMaps interface showing geographical places associated with <i>Grettis saga</i> manuscripts, organized by date of manuscript.	76
3.7.	Screenshot of Google MyMaps interface showing geographical places associated with <i>Grettis saga</i> manuscripts, organized by date of manuscript and showing manuscript locations outside Iceland..	77

3.8.	Screenshot of Google MyMaps interface showing geographical places associated with <i>Grettis saga</i> manuscripts, organized by place of origin (true/false).....	77
3.9.	Screenshot of Google MyMaps interface showing geographical places associated with <i>Grettis saga</i> manuscripts and geographical places named in <i>Grettis saga</i>	78
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., Grettisoddi) that have been given geographical coordinates.....	79
4.1	Östra Älgsjö, Bjälbo parish. The image to the left shows a map by Johan Larsson made around 1635–1637. The map to the right, dated 1638–1639, depicts the same hamlet and is made by the same surveyor.....	98
4.2.	The extent of large-scale maps in Sweden during the seventeenth century.....	100
4.3.	Data model or graph in RDF used to describe relations (triples) in TORA.....	109
4.4.	Architecture and data flows in TORA.....	110
5.1.	The structure of the Swedish place-name collection in the archive of Isof.	117
5.2.	Search results in the old version of the Swedish digital place-name register.....	118
5.3.	The new Swedish digital place-name register, displaying the results of the simple search for “Uppsala.”	121
5.4.	System description.....	123
5.5.	The design of the Swedish digital place-name register.....	124
5.6.	The simple search entry function in the Swedish digital place-name register.....	127
6.1.	Schematic overview of indirect location as used in place-name research. The place-name expression is here used as the name attribute for three different locations.	141
6.2.	Example of direct location with multiple place-names in different languages. Direct location is here represented by a point location of a named feature. This direct location is known by multiple names, which is typical of multilingual areas.	143

6.3.	Schematic example of current and previous spellings of a place-name.	146
6.4.	Map showing result of not stating a same-origin place-name relationship between localities/feature types.....	147
8.1.	Overview map (1:20,000), 1836, based on enclosure maps and cadastral maps (1:4,000), ca. 1792–1816, showing each landowner’s plot in the parish of Villersø in eastern Jutland.....	188
8.2.	Land unit versions per land unit, 1660–2012.....	189
8.3.	Simplified data model of the DigDag project. Text items such as “Administrative units” stand for tabular data.	191
8.4.	Graphical illustration of two administrative units and their four geographical versions, shown with different colours with both precise dating, interval dating (marked with two colour stripes and “?”), and “open-start”/“open-end” dating (marked with “<?” and “?>” respectively).	193
8.5.	Dating of administrative units and their versions shown in Figure 8.4.	193
8.6.	Percentages of areas affected by interval dating over time for land units (dashed line) and the parishes (solid line), 1660–2012.....	194
8.7.	Schematic illustration of geographical changes in seven land units, 1682–2012.....	196
8.8.	Schematic illustration of geographical changes in seven land units and the mapping method of the DigDag project, 1682–2012.....	197
8.9.	Data underlying the DigDag mapping method in Figure 8.8, 1682–2012.	198
8.10.	Schematic illustration of geographical changes in seven land units and the mapping method of the DigDag project, 1682–2012.	199
8.11.	Data underlying the DigDag mapping method in Figure 8.10 for LUs 3 and 4.	199
8.12.	DigDag interface in which the municipalities (“Kommunal”) filter has been selected and the date April 13, 1887 chosen.....	200

8.13.	DigDag interface in which two types of administrative units in the Copenhagen area, the present-day municipalities (black lines) and the parishes, dated February 2, 1665 (dark grey lines), have been chosen.	201
8.14.	Map based on the combination of two parish maps from 1801 and 1870 showing population growth (%) per parish.	202
9.1.	A map of regions numbered as Pausanias's volumes of the <i>Periegesis Hellados</i>	208
9.2 (a) and (b).	Passages of Pausanias as they appear in the Scaife Digital Library Viewer Interface, including format options for exporting the passage, word list, morphology, and commentary.	214
9.3.	The Recogito user interface, including example of a regional name, its location on the map by Pleiades gazetteer alignment, and comment box.	217
10.1.	Countries mentioned in <i>Hertig Fredrik av Normandie</i> and <i>Flores och Blanzefflor</i> in D 4a.	231
10.2.	Cities mentioned in <i>Hertig Fredrik av Normandie</i> and <i>Flores och Blanzefflor</i> in D 4a.	232
11.1.	The place-name data structure employed by the Norse World infrastructure.	252

Tables

1.1.	Types of non-names in Norse World.	23
1.2.	Types of localities in Norse World.	24
2.1.	Medieval parish churches and origin of data in cultural heritage collections.	39
2.2.	In the database structure, "Type of evidence" for "Cult manifestations" is divided into five categories. These are further divided into a number of more specific subcategories.	45
6.1.	Examples of toponyms from Frøya, Norway, with similar place-name expressions across different feature types.	150
6.2.	Concept table featuring "LocalityID" and "NameID."	151

6.3.	Concept table showing how “NameID” can be managed with toponyms compounded with place-name concepts of other toponyms.	152
6.4.	Concept showing historical forms in the dataset. The different direct locations are represented by individual “LocalityIDs,” whereas different indirect locations are represented by individual “NameIDs.”	154
10.1.	Place-names in the three manuscripts that all contain <i>Hertig Fredrik av Normandie</i> and <i>Flores och Blanzeflor</i>	230
11.1	Overview of Old Swedish and Old Danish variant forms associated with the standard form “France” from the most frequent to the least in the Norse World resource.	259

