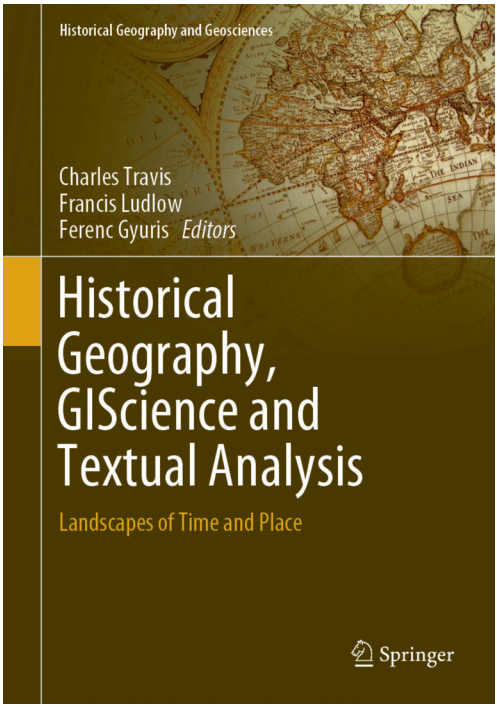
Travis, C., Ludlow, F. and Gyuris, F. (eds.): Historical Geography, GIScience and Textual Analysis. Landscapes of Time and Place. Cham, Springer, 2020. 272 p.

Historical geography was relatively slow to adopt methods and approaches of geographical information systems (GIS). As Gregory, I.N. and Haley, R.G. (2007) pointed out, even in the late 1990s the main texts describing the state of the discipline rarely mentioned this new field. This was happening despite the fact that the rapid development of technology and the appearance of more accessible desktop software saw the widespread incorporation of GIS into other disciplines. Fortunately, this have changed rapidly with the turn of the century with authors tackling the matter. Classic positions from that early period include Anne Knowles' (2002) *Past Time, Past Place: GIS for history* and Gregory, I.N. *et al.* (2001) *Geographical information and historical research: Current progress and future directions*. In the latter, the authors identified that the main advantages of using GIS are the ability to integrate data using its location, the ability to create maps and visualisations, and the possibility of using location as an explicit part of the analysis itself. This description gave the tone for the early period of Historical GIS in which GIS was perceived mainly as a tool. The first notable projects that resulted from this interdisciplinary marriage was *The Great Britain Historical GIS Project* (Gregory, I.N. *et al.* 2002) and *China Historical GIS* (Bol, P. and Ge, J. 2005). In the following years, Historical GIS became a lively discipline and many scholars took the challenge of incorporating GIS based methods in their research (Knowles, A.K. 2005; Gregory, I.N. and Healey, R.G. 2007). Recently there is a renewed interest and new approaches like spatial humanities (Gregory, I.N. and Geddes, A. 2014) and public participatory historical GIS (Lafreniere, D. *et al.* 2019) are being considered and applied. This is the rich landscape of thought and research practices into which this book appears.



The main aim of this book as expressed in the introductory chapter is to explore the possibilities of triangulating methods used in the fields of historical geography, geographic information science, and textual analysis. This is done in hope of transgressing interdisciplinary boundaries (or "methodological silos" in words of Charles Travis) to envision new ontologies and epistemologies that will help in understanding and modelling human and environmental phenomena. And the wide range of topics and methodologies presented in the chapters of this book let me believe that this is indeed, a valuable exercise with the potential of advancing our knowledge of the phenomena that are being the subject of intersecting fields of inquiry of those three disciplines.

The reviewed volume belongs to a relatively new Springer series called "Historical Geography and Geosciences." This is an interesting array of titles covering a wide range of topics related to spaces, places and their histories and geographies. This particular volume is a nice addition to the series portfolio, since its broad view on the matter means that a potential reader can enjoy finding many new takes on the intersection of history and geographical information systems and science. Its three editors are researchers well known in their respective fields. Charles Travis is Professor of Geography and Geographical Information Science at the Department of History at the University of Texas, Arlington. He is an expert in various applications of GIS in fields as diverse as humanities, environmental cartography and historical, literary and cultural geography. He has previously published books connecting the topics of history and GIS. Francis Ludlow is Professor of Medieval Environmental History at Trinity College Dublin. He is a leading expert on historical dynamics of climate, violence and conflict and he positions his research interests within a relatively new interdisciplinary field of climate history. Ferenc Gyuris is an Associate Professor of Geography at the Institute of Geography and Earth Sciences at Eötvös Loránd University, Budapest, with an interest and publications covering topics from regional sciences to geog-

raphies of Communism and post-Communist transition. The authors of the individual chapters present a wide range of expertise and stages of scientific career, which resulted in an interesting mix of methodological approaches and subjects of study. One might however note that apart of being predominantly male, they are also mainly affiliated within US universities with a small addition of Western European researchers. I wonder whether a more geographically diverse choice of voices would result in an ever more interesting view on this field of study.

Historical Geography, GIScience and Textual Analysis: Landscapes of Place and Time is separated into four parts consisting of four chapters each and an Introduction by Charles Travis. In the latter, the author guides the reader thorough interesting meanders of past and present tensions and paradigms that shaped the discipline of historical geography and the views on human and historical agency. We are learning about the cultural, spatial and computational turns as well as environmental determinism that have all influenced the current state of the intra- and interdisciplinary discourse. A significantly smaller part of the introduction is given to the GIS and textual analysis, mainly in relation to their integration potential that can lead to addressing research problems in all three disciplines. This triangulation manifesto is giving the tone to the rest of the book.

Part I (*Landscape, Time, Text*) almost directly exemplifies the main theme of this volume by demonstrating various blends of methods. Chapter 1 (*Ghost Cathedral of the Blackland Prairie*) by Charles Travis and Javier Reyes uses GIS database and three text maps to show how perceptions of landscape, identity and sense of place are built upon a specific locale. This chapter raises an important voice in the discussion about the problems that GIS have with subjective concepts of place. In Emily Lethbridge's Chapter 2 (*Digital Mapping and the Narrative Stratigraphy of Iceland*) describes methodological challenges and processes involved in creating Icelandic Saga Map, a digital mapping project aimed at linking Iceland's medieval text corpus with the country's physical geographies. We are also given theoretical insights coming from the results of the project, on the intricate and not obvious relations between Icelandic sagas and places. Chapter 3 with the catchy title *Dead Men Tell Tales: History and Science at Duffy's Cut* introduces us to a captivating story of Irish ghosts and homicide in Pennsylvania. William E. Watson, J. Francis Watson and Earl H. Schandelmeir give us an example of forensic investigation that combines geography, GIS and textual analysis to re-frame Irish immigrant historiographies. Chapter 4 (*Please Mention the Green Book: The Negro Motorist Green Book as Critical GIS*) by Ethan Bottone presents a novel approach to the analysis of the well-researched Green Book, a travel guide for Afro-Americans popular between 1936–1966. Reading of this material through the epistemologies of geographic information science reveals a spatialised history of racial discrimination and resistance and allows for a new look both at the past and present of Black Geographies.

In the following four chapters that together form Part II titled *Cultures, Networks and Mobilities*, the undertone of GIS grows much stronger and the power that it brings to the investigation of the past and present phenomena is explicitly visible. The first chapter by Damon Scott (*Queer Cartographies: Urban Redevelopment and the Changing Sexual Geography of Postwar San Francisco*) investigates the associative power of GIS, and shows how it can be used to excavate complicated spatial histories of stigmatised places of the post-war LGBTQ communities. This chapter is an interesting methodological study on the limitations of Critical GIS approach. The next chapter (*Revisiting the Walking City: A Geospatial Examination of the Journey to Work*) is authored by Don Lafraniere and Jason Gilliland. It is taking the readers through an almost classical and brilliantly executed journey through GIS informed historical analysis. The authors offer us a methodologically innovative approach that allowed them to explore daily mobilities of 1881 Ontario with surprising accuracy and insight, illustrated by well-designed maps and visualisations. The third chapter (*Corruption and Development of Atlanta Streetcar Lines in the Nineteenth Century: A Historical GIS Perspective*) by S. Wright Kennedy uses GIS to analyse new data sources, unveiling the previously unseen history of public transportation in Atlanta. *A Brother Orangeman the World Over": Migration and the Geography of the Orange Order in the United States* by Cory Wells and Charles Travis is the final chapter in this part of the book. It employs historical GIS methods to investigate the demographics of the Orange Order (a Protestant organisation) migrants' origins and destination.

In Part III (*Climate, Weather, Environment*) the approach presented is almost reversed. Here the geosciences play the leading role while historical and textual analysis methods are used to introduce socio-economic dimensions. Jase Bernhardt's chapter (*Mining Weather and Climate Data from the Diary of a Forty-Niner*) shows how literary sources can be used to extract and visually represent spatiotemporal patterns in meteorological conditions. In Chapter 10 (*Unmappable Variables: GIS and the Complicated Historical Geography of Water in the Rio Grande Project*) Daniel R. Beene and K. Maria D. Lane show the value of mixed methods approach by combining GIS and historical-critical physical geography. This allows to capture complex dimensions of the Rio Grande Project irrigation practices and its lasting ramifications. The next chapter is by Chris Hewitt (*Supplying the Conquest: A Geospatial Visualization and Interpretation of Available Environmental Resources at*

the Battle of Hastings in 1066). It presents a fresh insight into the geographical and historical contexts of the battle by applying GIS analysis of environmental resources. Robert Legg, Francis Ludlow and Charles Travis in Chapter 12 titled *Mapping the Irish Rath (Ringfort): Landscape and Settlement Patterns in the Early Medieval Period* bring the geostatistical methods into the analysis of the spatial patterns of ringforts locations. They also present a methodological insight into mixing GIS and fieldwork methods.

The final part of this volume is titled *Place, Philology, History* and focuses mainly on the mapping of historical landscapes and explores the links between GIS and humanities. In the first chapter (*Mapping Power: Using HGIS and Linked Open Data to Study Ancient Greek Garrison Communities*) Ryan Horne introduces the reader to the possibilities and shortcoming of using HGIS and Linked Open Data to study ancient communities. It is an informative reading into the rapidly developing world of digital infrastructures of data that had recently matured enough to be considered valid research tools. In Chapter 14, Gordon Cromley and Chris Post are exploring the potential of humanities GIS to rethink geographical and historical processes. In *The Preservation of Paradox: Bismarck Towers as National Metaphor and Local Reality*, they present the results of kernel density estimates, geo-visualisations and exploratory data analysis applied to the network of Bismarck monuments. Chapter 15 (*Mapping the Historical Transformation of Beijing's Regional Naming System*) by Yong Yu presents a unique approach to place names, where their spatial distribution reflects changes in the social and political history of the region. The final chapter of the book (*Geographical Enrichment of Historical Landscapes: Spatial Integration, Geo-Narrative, Spatial Narrative, and Deep Mapping*) by May Yuan allows the reader to glimpse into the future of innovations and advances in Geographical Information Science and Technology (GIST). In the text, one can find not only discussions on unmanned aviation vehicle (UAV) surveys, virtual reality, and augmented reality but also a thorough review of cartographic and phenomenological views on landscape.

When we consider the chapters as a whole, we can see that this is a very thorough and up-to-date compilation of the various views on the exercise of inter- and transdisciplinary research. Connecting all the chapters is the feeling of transgressing boundaries – both disciplinary and methodological. I perceive this as a main strength and selling point of this volume. There are many edited compilations with a similar aim, to introduce a mixed method approach, but it is surprisingly rare to find one that give this proposition without much bias. Here the readers can see the very different viewpoints on the seemingly similar problems and there is no indication that history, geosciences, geography or cultural studies have been given a dominant voice. For me, this is a clear sign that this approach is needed to successfully tackle research problems of the landscapes of time and place. However, despite its aforementioned strengths, the book has some weaknesses as well. I must confess here that I see myself as a digital geographer with a strong GIS background and this brings a certain bias to the way I see this book and evaluate its contents. With that being said, here are the things that I think are weaker parts of this title.

First and foremost – the quality of maps. This issue raises to importance in my view due to the fact that GIS is one of the main selling points here. Therefore, I would like to see all the maps well designed. It is not that there are none, but among the well-thought and brilliantly executed cartographic visualisations that shine in some of the chapters there are also a couple of bad apples. Maps in the same time form a strong backbone of this book and its weakest point. Some of the maps look dated with their choice of mapping techniques. Some clearly infringe on the cartographic principles. There are examples of bad colour palettes and symbology, lack of figure-ground distinction, unnecessary map decorations and 3D visualisations. Since in most cases those are relatively minor mistakes and omissions could be improved easily, I think that this could have been done with a little bit more editing effort.

The second issue I have with this title is admittedly strictly related to my background and interests, but I think that it is something that would be noticeably missing for many geographers/GIS scientists reading this book. The thing I am missing here is a more in-depth methodological and interdisciplinary discussion on the coming together of history, geography and GIS. Especially it is not hard to see how in many chapters GIS is treated as a tool without taking into account the rich landscapes of theory that amassed during the evolution of this discipline. Given the editors' strong background, I have expected a little bit more. However, this does not take any value from the included chapters – just that it feels like an opportunity have been missed here to even further advance the field.

All in all, those weaknesses are small in comparison to the potential impact of this book. It can certainly be seen as an excellent source of inspiration and the description of the current state of the art – an update for a classic book by Gregory, I.N. and Ell, P.S. (2007). With its wide coverage of the potential interactions and intersections of history, geography and GIS, it gives an excellent overview of the possibilities waiting in this lively area of research. I would recommend it as a must read to anyone that dabbles with Historical GIS. Not only that, but it is worth considering to any early career researcher or postgrad student of history or geoscience as an example of the way we can mix and blend methods from different disciplines to gain deeper insights and understanding. For this alone, it is worth making acquaintance with this volume.

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REFERENCES

Bol, P. and Ge, J. 2005. China Historical GIS. *Historical Geography* 33. 150–152.

Gregory, I.N., Kemp, K.K. and Mostern, R. 2001. Geographical information and historical research: Current progress and future directions. *History and Computing* 13. (1): 7–23.

Gregory, I.N., Bennett, C., Gilham, V.L. and Southall, H.R. 2002. The Great Britain Historical GIS Project: from maps to changing human geography. *The Cartographic Journal* 39. (1): 37–49.

Gregory, I.N. and Ell, P.S. 2007. *Historical GIS: Technologies, Methodologies, and Scholarship.* Cambridge, Cambridge University Press.

Gregory, I.N. and Healey, R.G. 2007. Historical GIS: structuring, mapping and analysing geographies of the past. *Progress in Human Geography* 31. (5): 638–653.

Gregory, I.N. and Geddes, A. (eds.) 2014. *Toward Spatial Humanities: Historical GIS and Spatial History.* Bloomington, Indiana University Press.

Knowles, A.K. (ed.). 2002. *Past Time, Past Place: GIS for history.* Redlands, ESRI.

Knowles, A.K. 2005. Emerging trends in historical GIS. *Historical Geography* 33. 7–13.

Lafreniere, D., Weidner, L., Trepal, D., Scarlett, S.F., Arnold, J., Pastel, R. and Williams, R. 2019. Public participatory historical GIS. *Historical Methods: A Journal of Quantitative and Interdisciplinary History* 52. (3): 132–149.

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