



ROUTLEDGE
HANDBOOKS



The Routledge Handbook of Cartographic Humanities

Edited by Tania Rossetto and Laura Lo Presti

‘Maps move, and this Handbook assembles a variety of vantage points to witness such movements: textual, sensorial and the more-than-representational, cinematic and the virtual, resistive and mundane, grounded and atmospheric, monumental and ephemeral. Careful to not recuperate mapmaking but make it more responsible, more resonating, this collection bends, without breaking, the reverberative potential of the drawn line. It leaves mapmaking practices more curious, more open, more vibrational, without the privilege of an ahistorical treatment.’

Matthew W. Wilson, *Professor of Geography, University of Kentucky, USA*

‘Tania Rossetto and Laura Lo Presti have compiled a state-of-the-art collection of commentaries on the many ways in which the humanities and cartography are joined at the hip. Bringing together an international and interdisciplinary cast of writers on the cutting edge of geohumanistic enquiry they show how the seemingly instrumental rationalities of the map have always been, and always should be, richly discursive endeavours embedded in strategies of domination and resistance. This is a must-read collection for scholars across the humanities interested in the role of cartography in human meaning-making.’

Tim Cresswell, *Ogilvie Professor of Geography, University of Edinburgh, UK*

‘Mapping remains an extraordinarily diverse and generative technique for mediating the world. Committed to theoretical and methodological pluralism, this outstanding collection explores its technologies, politics and consequences through a rich range of case studies drawn from across “cartographic culture”, both historical and contemporary.’

Gillian Rose, *Professor of Human Geography, University of Oxford, UK*



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THE ROUTLEDGE HANDBOOK OF CARTOGRAPHIC HUMANITIES

The Routledge Handbook of Cartographic Humanities offers a vibrant exploration of the intersection and convergence between map studies and the humanities through the multifaceted traditions and inclinations from different disciplinary, geographical and cultural contexts.

With 42 chapters from leading scholars, this book provides an intellectual infrastructure to navigate core theories, critical concepts, phenomenologies and ecologies of mapping, while also providing insights into exciting new directions for future scholarship. It is organised into seven parts:

- Part 1 moves from the depths of the humans-maps relation to the posthuman dimension, from antiquity to the future of humanity, presenting a multidisciplinary perspective that bridges chronological distances, introspective instances and social engagements.
- Part 2 draws on ancient, archaeological, historical and literary sources, to consider the materialities and textures embedded in such texts. Fictional and non-fictional cartographies are explored, including layers of time, mobile historical phenomena, unmappable terrain features and even animal perspectives.
- Part 3 examines maps and mappings from a medial perspective, offering theoretical insight into cartographic mediality as well as studies of its intermedial relations with other media.
- Part 4 explores how a cultural cartographic perspective can be productive in researching the digital as a human experience, considering the development of a cultural attentiveness to a wide range of map-related phenomena that interweave human subjectivities and nonhuman entities in a digital ecology.
- Part 5 addresses a range of issues and urgencies that have been, and still are, at the centre of critical cartographic thinking, from politics, inequalities and discrimination.
- Part 6 considers the growing amount of literature and creative experimentation that involve mapping in practices of eliciting individual life histories, collective identities and self-accounts.
- Part 7 examines the variety of ways in which we can think of maps in the public realm.

This innovative and expansive Handbook will appeal to those in the fields of geography, art, philosophy, media and visual studies, anthropology, history, digital humanities and cultural studies as well as industry professionals.

Tania Rossetto is Associate Professor of Cultural Geography at the University of Padua, Italy.

Laura Lo Presti is Junior Assistant Professor of Geography at the University of Padua, Italy.



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Photo by Giada Peterle. Courtesy of the authors.

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CONTENTS

<i>List of figures</i>	<i>xii</i>
<i>List of tables</i>	<i>xvii</i>
<i>List of contributors</i>	<i>xviii</i>
Introduction: why cartographic humanities? <i>Tania Rossetto and Laura Lo Presti</i>	1
PART 1	
Preludes and trends	13
1 Mapping inner worlds: cartography as a humanity <i>Veronica della Dora</i>	15
2 Chorography, cartography and the geospatial humanities <i>Javier Arce-Nazario, Janet Downie, Tim Shea, John Pickles and Toni Veneri</i>	27
3 Processual map history <i>Matthew H. Edney</i>	38
4 Spatial anthropology and deep mapping <i>Les Roberts</i>	47

Contents

5	Don't believe the mapping hype! Three steps back for an engaged cartography <i>Paul Schweizer, Severin Halder and kollektiv orangotango</i>	54
6	Posthuman cartographies <i>Joe Gerlach</i>	61
PART 2		
Textural connections		69
7	<i>In brevi tabella</i> . Thinking with diagrams in late antiquity <i>Salvatore Liccardo</i>	71
8	Archaeology, crafting maps and political change <i>Piraye Hacigüzeller</i>	79
9	Charting movement through historical sources <i>Tiago Luís Gil</i>	88
10	Zoocentric texts and cartographic contradictions <i>Sally Bushell</i>	97
11	Writing with maps <i>Julien Nègre</i>	106
12	A plea for slow mapping <i>Jörn Seemann</i>	114
PART 3		
Mediations and intermedialities		125
13	A media theory of (western) cartographic imagination <i>Tommaso Morawski</i>	127
14	The map in cinema and cinema on the map <i>Giorgio Avezù</i>	135
15	The antithetical cartographies of geospatial cinema <i>Chris Lukinbeal</i>	143
16	Firing up map thinking: music video meta-maps <i>Tania Rossetto</i>	152

Contents

17	Worlds for sale: cartography in print advertisements <i>Davide Papotti</i>	162
18	Maps as design tools: space, time and experience <i>Roger Paez, Manuela Valtchanova, Ferran Larroya and Josep Perelló</i>	172
PART 4		
	Cultural digitalities	183
19	Digital narcissism and GPS selfies: the entry of the self <i>Claire Reddleman</i>	185
20	Automated mapping cultures <i>Sam Hind</i>	193
21	Map fetishism and the power of maps: a feminist-technoscience perspective <i>Valentina Carraro</i>	200
22	Ethnography and maps in the digital age <i>Mike Duggan</i>	208
23	A humanistic rewire of GIScience <i>Bo Zhao</i>	216
24	The Cine-Tourist's online cartographic curiosity cabinet <i>Tadas Bugnevicius</i>	223
PART 5		
	Troubles and disruptions	233
25	Emptying and filling. Maps of inland Africa <i>Andrea Pase</i>	235
26	Cartography contra colonialism <i>Clancy Wilmott</i>	246
27	Indigenous cartographies <i>Davi Pereira Junior and Bjørn Sletto</i>	254

Contents

28	Black cartography as memory work <i>Stephen P. Hanna</i>	261
29	Gender and mapping culture <i>Christina E. Dando</i>	270
30	Mapping as a mode of governance in the Anthropocene <i>David Chandler</i>	280
PART 6		
	Elicitations and co-creations	289
31	Co-creative mapping of memories <i>Élise Olmedo, Emmanuelle Kayiganwa and Sébastien Caquard</i>	291
32	Mapping as the art of listening to Jewish Mediterranean migrations <i>Piera Rossetto</i>	301
33	Drawing (on) cartographic intimacies <i>Laura Lo Presti</i>	311
34	Auto-cartography: (fictional) ethnographies of the self and the map in the field <i>Giada Peterle</i>	321
35	Re-situating participatory cultural mapping as community-centred work <i>Nancy Duxbury and W. F. Garrett-Petts</i>	329
36	Mapping narratives on historical tours <i>Stephen P. Hanna, Amy E. Potter and Derek H. Alderman</i>	339
PART 7		
	Public cartographic humanities	349
37	The social life of maps <i>Martin Brückner</i>	351
38	Public map exhibitions: what goes in and what comes out <i>Tom Harper</i>	360

Contents

39	Participatory network mapping for public action <i>Barbara Brays Shay and Aldo de Moor</i>	371
40	The public outreach of the ICA Commission on Art and Cartography <i>Taien Ng-Chan</i>	381
41	The (aesth)ethics of publishing geopolitical maps <i>Laura Lo Presti and Tania Rossetto</i>	389
42	MapLab: a Bloomberg newsletter connecting maps and the news <i>Laura Bliss and Marie Patino</i>	400
	<i>Index</i>	407

FIGURES

1.1	<i>Allegory of Geometry</i> , Mantegna tarocchi, fifteenth century.	18
1.2	Abraham Ortelius, <i>Typus orbis terrarum</i> , 1570.	19
1.3	Auguste-Jacques Lemierre d'Argy, <i>Voyage of Youth to the Land of Happiness</i> , 1802.	21
1.4	George Wright, <i>The Journey of Life</i> , 1775.	23
2.1	Map of the island of Crete (Candia) in the <i>Isolario</i> compiled by the Venetian shipmaster Bartolomeo dalli Sonetti (1485). The first printed book of islands, as well as the first printed collection of nautical charts, this publication 'contains the first printed maps supposedly based on actual observation; and it is the first printed collection of maps to owe no debt to Ptolemy' (Campbell, 1987: 90).	30
2.2	Map showing central and southern Attica with deme centres and modelled deme boundaries using cost-path analysis in GIS alongside <i>horos</i> inscriptions possibly related to deme boundaries.	33
2.3	Chorographic visualisation of the sugarcane plantations using oblique pictures taken in 1941. The visualisation is layered with waypoints, lines and transparent hues, and a legend is given to facilitate the reading of the landscape. These pieces were placed near a window looking towards the areas pictured, to provide more reference to the oblique viewpoint.	35
2.4	(a) One of the first visitors interacting with a visualisation based on an 1883 map by the Spanish Military Engineers. (b) The map several weeks after the opening of the exhibit. The multiple layers are narratives that converse with narratives left by other visitors as well as with the spaces in the base map and elsewhere in Vieques.	35
3.1	Daniel K. Wallingford, <i>A New Yorker's Idea of the United States of America</i> (New York: Columbia University Press, 1936), read by many post-war geographers as exemplifying the irrationality of cognitive maps. Colour lithograph, 19 cm × 25 cm.	39
3.2	William Godsoe, 'A Plott of mr Humphrey Chadburns farm att Sturge[o]n Creek' (6–7 October 1701). Pen and ink on paper, 35 cm × 45 cm.	43

Figures

3.3	Schematic diagrams of (upper) the strictly local spatial discourse of urban maps of Portland, Maine, in the early nineteenth century and (lower) the modified discourse once Philadelphia publishers sought to meet local demand for urban maps.	44
7.1	Pal. Lat. 973, f. 8r. (Reims, 2nd half of the ninth century). Sketched T-O map drawn next to the text of the <i>Cosmographia</i> of Julius Honorius.	75
8.1	Single-person playful narrative map for cooking at the Bronze Age building of Zeta Beta in Malia (Crete), by the author. In the narrative, an individual picks up the lamp in Space XVII (A1) to venture into the possibly dark closet located northeast of Space X. Upon reaching the entrance of the closet (A2), they set the lamp on the partitioning wall to their right and take a bowl and a cup. They then approach the two pithoi situated along the east wall of Space X (A3), use the cup to scoop out foodstuff to fill the bowl, and subsequently place the cup back into the pithos. The narrative extends to other areas of the building and can also be broadened to feature two, three or more individuals (Hacigüzeller, 2017: figure 2), presenting the building as lived-in, humming with people and daily buzz.	84
9.1	Varieties of motion maps. 1A—Comic map inspired by Guerreau Alain. L'atelier monétaire royal de Mâcon (1239–1421). In: <i>Annales</i> . 29 ^e année, 1974 (2): 377; 1B—Stage map inspired by Bautier Robert-Henri. Feux, population et structure sociale au milieu du XV ^e siècle: l'exemple de Carpentras. In: <i>Annales</i> . 14 ^e année, 1959 (2): 262; 1C—Arrow map inspired by Lombard Maurice. La chasse et les produits de la chasse dans le monde musulman (VIIIe-XIe siècle). In: <i>Annales</i> . 24 ^e année, 1969 (3): 586; 1D—Contour line map inspired by Ruffié Jacques, Bernard Jean. Origine du polymorphisme hématologique chez l'homme et dynamique des populations. In: <i>Annales</i> . 34 ^e année, 1979 (6): 1329; 1E—Place and date map inspired by Jansen P. Ph. Aux Pays-Bas, une prodigieuse conquête: le plan Delta. In: <i>Annales</i> . 16 ^e année, 1961(4): 660.	90
9.2	Charting movement with historical sources.	93
10.1	First Edition Map for <i>Watership Down</i> (1972).	99
10.2	Second Edition Map by Pauline Baynes for <i>Watership Down</i> (1973).	100
10.3	Endpaper Map for <i>Tarka the Otter</i> Nonesuch Edition (1964).	104
12.1	<i>Representação do Relevo por Hachuras e por Esbatido</i> (relief representation by hachuring and graduation).	115
12.2	Detail from <i>Landforms of the Northwestern States</i> .	119
14.1	Regional popularity of <i>Call Me by Your Name</i> (Luca Guadagnino, 2017). Author's elaboration based on Cinetel data on theatrical admissions. The regional popularity index (RPI) normalises the regional share of admissions to the median figure (for each region) of the 500 most viewed domestic films for the years 2000–2020. A value of 1.5 indicates a popularity 50% higher than the median regional value, while one of 0.5 denotes a popularity 50% lower than normal.	140
15.1	Three aspects of cartography.	147
15.2	LA Feature Film Genre Density Map (color map available at: https://sites.google.com/view/lukinbeal/home/los-angeles).	148

Figures

15.3	1958 Spatially accurate 3D model of Old Tucson Studios with 3D rectified stills from the film <i>Rio Bravo</i> (color geovisualization available at https://sites.google.com/view/lukinbeal/home/old-tucson-studios).	149
16.1	Composition of screen grabs by the author from the music video for Röyksopp's <i>Remind Me</i> .	155
16.2	Composition of screen grabs by the author from the music video for Alex Gopher's <i>The Child</i> .	157
16.3	Composition of screen grabs by the author from the lyric music video for Chris Cornell's <i>Nearly Forgot My Broken Heart</i> .	158
17.1	In an advertisement of the Smart automobile from the early 2000s, the map (in an urban setting and in a road atlas style) appears in an unusual context: the sole of a shoe.	165
17.2	The 'real' shape of the island of Pantelleria, in Southern Italy, is superimposed by geographical names taken from Milan's city centre to suggest the proximity between the area of departure and the tourist destination.	166
17.3	An early 2000s advertisement from the Grana Padano Production Consortium (an Italian cheese protected by a denomination of origin recognised by the European Union) presents a map of the world (with the very word <i>mappamondo</i> —map of the world—in the forefront) to state the commercial primacy of the product.	168
18.1	Spatial mapping. Left: Parameterisation of urban quality to inform strategic planning. Marianao, Sant Boi de Llobregat (CP1). Right: Areas of opportunity for social interaction based on party wall studies. Primer de Maig, Granollers (CP3).	175
18.2	Temporal mapping. Left: Pedestrian flows and areas of gathering. Marianao, Sant Boi de Llobregat (CP1). Right: digital tracking of <i>Fem la Nostra Festa</i> action. Primer de Maig, Granollers (CP3).	176
18.3	Experiential mapping. Left: Narrative-based subjective mapping. Raval, Barcelona (CP2). Right: Action-based citizen science data gathering. Primer de Maig, Granollers (CP3).	178
18.4	From map to design. Left: Public space parameterisation to simulate citizen behaviour. Marianao, Sant Boi de Llobregat (CP1). Centre: Narrative polygons spatialising identified matters of concern. Raval, Barcelona (CP2). Right: Clustering of citizen-activated areas. Primer de Maig, Granollers (CP3).	179
19.1	GPS selfie.	188
24.1	Lack's finger pointing at the walking tour itinerary for a location of an Alice Guy film in <i>Be Natural</i> .	224
24.2	Last entry in the 'Maps in films' blog on the <i>Cine-Tourist</i> website.	226
24.3	Lack's plotting of Marie and Baptiste's chaotic itinerary after they meet near the Place Denfert-Rochereau in Rivette's <i>Le Pont du Nord</i> .	229
25.1	Vandermaelen, <i>Atlas Universel, Africa</i> (1827). Carte d'assemblage.	237
25.2	Vandermaelen, <i>Atlas Universel, Africa</i> (1827). Carte n° 24 and Carte n° 31, juxtaposed.	238

Figures

25.3	<i>Tracé de la frontière de l’Afrique Equatoriale Française et du Soudan Anglo-Egyptien</i> . The signs drawn on the map identify the overlapping areas with sheets 24 (above) and 31 (below) of Vandermaelen’s Atlas.	240
28.1	John Washington’s mapping of Fredericksburg, Virginia. John Washington Papers, 1858–1865, 1982, Accession #15000, Special Collections, University of Virginia Library, Charlottesville, VA.	262
28.2	The ‘Bound for Freedom’ wayside panel marking where Washington crossed the Rappahannock River to freedom. Photograph by author.	266
29.1	<i>The Arrowhead</i> , 1929. Created and published by the Hibbing Branch of the American Association of University Women, Hibbing MN. This full-colour, richly illustrated map focuses on the history and culture of the ‘Arrowhead’ region of northern Minnesota, enlivened with scenes and text of its life, history, and mythology. Just north of Hibbing, at the centre of the map, there is a camp scene with a lumberjack chopping down a tree, a label above reading ‘The lumberjack clears away the wilderness’. To the east (north is at the top of the map), by the shores of Lake Superior, there is a scene with a Native American woman and child outside a wigwam, with the opening lines of Henry Wadsworth Longfellow’s poem <i>Hiawatha</i> : ‘By the Shores of Gitchee Gumee, By the Shining Big-Sea-Water, Stood the Wigwam of Nokomis’ (1855). Around the left, bottom, and right of the map is a vignette border, illustrating significant points in Minnesota history, beginning in the upper left and moving counterclockwise, with geologic history, early Native peoples, European explorers, early Minnesota history, as well as folklore (Paul Bunyan and Babe, the Blue Ox). On the left and right of the map is a beautiful floral border. Size of the original: 54 cm × 87 cm.	271
29.2	Detail of <i>The Arrowhead</i> (1929). This detail from the lower right corner captures the identification of the map creators as well as examples of the vignettes and the floral border. The corner vignette includes the only nudity on the map: the naked back of James J. Hill as he fords a stream, clothes balanced on his head, for a fateful meeting with Lord Strathcona.	276
31.1	Collaborative map representing Emmanuelle’s childhood, a missing part of her initial story, Emmanuelle Kayiganwa, Élise Olmedo, 2023.	295
31.2	Successive versions of the collaborative map representing Emmanuelle’s childhood, Emmanuelle Kayiganwa, Élise Olmedo, 2023.	296
32.1	Original hand-drawn maquette for the ‘Ze hayah be-leil Shabbat—The Eve of the Shabbat’ creative project.	304
32.2	‘Ze hayah be-leil Shabbat—The Eve of the Shabbat’, the Mediterranean basin (internal side of the foldable printed artwork). Martina Melilli (Art direction and Texts), Michela Nanut (Graphic design and illustrations), Piera Rossetto (Scientific supervision).	305
32.3	‘Ze hayah be-leil Shabbat—The Eve of the Shabbat’, the imaginary letter (external side of the foldable printed artwork). Martina Melilli (Art direction and Texts), Michela Nanut (Graphic design and illustrations), Piera Rossetto (Scientific supervision).	306

Figures

33.1	MF (2023) <i>Geographies on the flesh</i> .	316
33.2	A selection of creative cartographies centred around the idea of anthropomorphic maps or somatopias.	317
33.3	GC (2023) <i>No Man Is an Island, Maybe . . .</i>	317
34.1	Föli map of public transport in the Turku region, Finland, January 2020.	325
34.2	Föli map unfolded on the floor of a small, one-room flat in the city of Turku, Finland, in January 2020.	326
35.1	Organising the field of cultural mapping: key branches and orientations.	334
36.1	Visitors approach Monticello's East Portico to start their tour.	340
36.2	Narrative map of Monticello's standard house tour.	345
37.1	Plate gift of Mr. and Mrs. John Mayer, bowl gift of S. Robert Teitelman, and jug bequest of Henry Francis du Pont.	352
37.2	Broadside, <i>Excursion! To Leominster, Wednesday, April 28, '52, to Enjoy the Entertainment to Be Given by J.G. McKindley, and Geographical Class</i> ([Fitchburg, MA] [1852]).	356
38.1	The evolving design and layouts of map exhibitions. Left: James Cook bicentenary exhibition, British Museum, 1968. Right: 'Maps and the 20th Century: Drawing the Line', British Library, 2016 (© British Library Board).	361
38.2	The effective cover illustration of the British Library's 1989 'What Use Is a Map?' exhibition catalogue. Like the exhibition, the illustration brought together images of very different types of objects under the umbrella term of 'map' (© British Library Board).	364
38.3	The 'Magnificent Map of King's Cross', a community-produced wall map produced as part of the King's Cross 'Reveal' festival during the British Library's 'Magnificent Maps: Power, Propaganda and Art' exhibition, on display in the lobby of the British Library in 2010.	366
39.1	A snapshot from the composite map of community issues and support services. See Brayshay and Mackie (2023) for the complete network maps.	376
39.2	A participatory mapping meta-model of bridging the community-institution support divide.	377
40.1	Emotional map of Tokyo's Yoyogi Park by Joanna Gardener, published with permission.	385
40.2	A screenshot of the Zoom meeting taken by the author (with permission), showing the hand-drawn maps of lockdown spaces by ArtCarto/HPU workshop participants.	386
41.1	Encountering the mapmaker. A map-elicitation session during fieldwork in Rome with Laura Canali in 2017.	390
41.2	Laura Canali's website.	395
41.3	<i>The Mediterranean Is Stone</i> exhibited at the Rotonda della Besana in Milan between two geopolitical maps, all by Laura Canali (2015).	396
42.1	The cover of <i>The Quarantine Atlas</i> .	403

TABLES

29.1	Maps produced by American Association of University Women chapters	272
36.1	Narrative mapping instrument questions developed by authors for Monticello	343
39.1	Issues identified by the community in the storytelling workshop	375

CONTRIBUTORS

Derek H. Alderman, University of Tennessee (USA), is a cultural-historical geographer specialising in public memory, race, civil rights, heritage tourism and critical approaches to mobility, place naming and mapping—often in the context of the African-American Freedom Struggle. He is (co)author of over 165 articles, chapters, and other essays.

Javier Arce-Nazario, University of North Carolina at Chapel Hill (USA), is an associate professor of geography. His work in South America and the Caribbean looks for new landscape histories and ways of mapping to increase the impact non-academic stakeholders have on landscape change, and the positive impact that landscape change research has on their communities.

Giorgio Avezzù, University of Bergamo (Italy), is an assistant professor of film and media studies. He is the author of two books dedicated to the relations between audiovisual content and geography; the most recent one discusses the geographies of audiovisual consumption in Italy.

Laura Bliss is a writer, editor and reporter. On staff at Bloomberg CityLab, she covers cities and the environment and is the founder of MapLab, a newsletter about maps. She was the host of *Bedrock, USA*, a podcast about extremism in local government, which was a finalist for a Webby Award and an Online Journalism Award. She was 2022–2023 Knight Science Journalism Fellow at MIT.

Barbara Brayshay, Royal Holloway University of London (UK), is a researcher in the Department of Geography specialising in the oral history of the UK Environmental Movement. She is also a director of LivingMaps Network, a group of radical cartographers, activists and artists with an interest in counter-mapping for social change.

Martin Brückner, University of Delaware (USA), is the director of the Winterthur Program in American Material Culture. He is the author of two award-winning books on geographic

literacy and the social life of maps; his published work addresses the material and spatial imagination in early American literary and visual culture.

Tadas Bugnevicius, Columbia University (USA), is a film and media scholar working on theories of modernity, post-WW2 French and Francophone cinema and Eastern European postsocialism. He is currently writing a book manuscript that reassesses the politics and aesthetics of the French Tradition of Quality (1941–1959).

Sally Bushell, Lancaster University (UK), is a professor of Romantic and Victorian Literature. Her research is concerned with literary spatiality and the mapping of texts in a range of ways (across process; empirically; digitally). She is also interested in digital and spatial projects for the mapping of literature.

Sébastien Caquard, Concordia University (Montreal/Tiohtià:ke, Canada), is a human cartographer working at the intersection between mapping, technologies, oral history and memories. He has led the development of Atlascine, an open-source platform dedicated to map stories in depth, to listen to them and to reflect on cartographic processes and practices.

Valentina Carraro, University of Amsterdam (the Netherlands), is an assistant professor at the Department of Human Geography, Planning and International Development Studies. Her research and teaching sit at the intersection of critical cartography, digital and political geography, with a focus on how digital technologies and practices reconfigure political imaginaries and relations.

David Chandler, University of Westminster (UK), is a professor of international relations. He edits the journal *Anthropocenes: Human, Inhuman, Posthuman*, and his recent books include *Resilience in the Anthropocene: Governance and Politics at the End of the World* (2020) and *Ontopolitics in the Anthropocene: An Introduction to Mapping, Sensing and Hacking* (2018).

Christina E. Dando, University of Nebraska Omaha (USA), investigates the intersection of landscape, media and gender. She is the author of *Women and Cartography in the Progressive Era* (2019), an exploration of American women's utilisation of mapping to advance causes that were important to them, including community improvement and suffrage.

Aldo de Moor is the founder of CommunitySense, a Dutch research consultancy specialising in community informatics. With a PhD from Tilburg University, he focuses on participatory community network mapping, collaborative sensemaking, collaboration ecosystems analysis and social-technical systems design, addressing complex societal issues through social innovation.

Veronica della Dora, Royal Holloway University of London (UK), is a professor of human geography. Her research interests and publications span historical and cultural geography and the history of cartography. Her current project explores representations of the life journey metaphor in western culture from classical antiquity through the age of the Anthropocene.

Contributors

Janet Downie, University of North Carolina at Chapel Hill (USA), is a classicist specialising in Greek literature of the Roman Imperial period. Her current research focuses on ancient geographical writing, literary topographies and constructions of Greek identity in the post-classical Mediterranean.

Mike Duggan, King's College London (UK), is a cultural geographer interested in how maps and mapping technologies shape social life and cultural practices. He is the editor-in-chief of the *Livingmaps Review*, a bi-annual journal for radical and critical cartography.

Nancy Duxbury, University of Coimbra (Portugal), is a senior researcher at the Centre for Social Studies. Her research spans cultural mapping, creative tourism development and culture in local sustainability. She leads the Horizon Europe project 'IN SITU: Place-based Innovation of Cultural and Creative Industries in Non-urban Areas' (<https://insituculture.eu/>, 2022–2026).

Matthew H. Edney, University of Southern Maine (USA), is Osher Professor in the History of Cartography and the Director of the History of Cartography Project (UW—Madison). He currently researches the historical emergence and articulation of fundamental concepts such as 'cartography' and 'the map'. See mappingsprocess.net for a full bibliography of his works.

W. F. Garrett-Petts, Thompson Rivers University (Canada), is a professor of English. He is engaged in exploring questions of visual and verbal culture, cultural mapping and the artistic animation of small cities. He has presented and published over 170 papers and articles, and 18 books, including, most recently, *Artistic Approaches to Cultural Mapping* (2019).

Joe Gerlach, University of Bristol (UK), is a cultural geographer with research interests in non-representational theory, critical cartography, ethics, geophilosophy, Spinoza, and micropolitics and minor theory.

Tiago Luís Gil, University of Brasilia (Brazil), is an associate professor of history of the Americas in the Department of History and the coordinator of the Digital Atlas of Portuguese America. He is the author of many books, chapters and articles. His research interests include HGIS, digital history, economic history and databases.

Piraye Hacıgüzeller, University of Antwerp (Belgium), is trained as an archaeologist and engineer. She works with geodata, metadata and machine learning within heritage, humanities and archaeological research, and on the philosophy of archaeological thought. She co-edited *Re-Mapping Archaeology: Critical Perspectives, Alternative Mappings* (2019).

Severin Halder, kollektiv orangotango/University of Münster (Germany), is an activist and geographer driven by experiences with everyday resistance in Rio de Janeiro, Bogotá, Berlin, Chiloé a.o. while working within kollektiv orangotango, community gardens and academia. He is currently working on the evolutions of the Not-an-Atlas project and is curating a compost festival.

Stephen P. Hanna, University of Mary Washington (USA), is a cartographer and cultural geographer focused on commemorative spaces and heritage tourism. His work in applying and developing critical mapping approaches to the ways public history is practised in landscapes can be found in over 70 articles, book, book chapters, research reports, opinion essays and other publications.

Tom Harper is the British Library's lead curator of antiquarian mapping. He has worked on numerous public map exhibitions including *Magnificent Maps: Power Propaganda and Art* (2010–2011), *Lines in the Ice: Seeking the Northwest Passage* (2014), and *Maps & the 20th Century: Drawing the Line* (2016–2017).

Sam Hind, University of Manchester (UK), is a media scholar researching digital navigation, sensing and autonomous driving. He is a co-author and co-editor of books on playful mapping and the praxeology of data.

Emmanuelle Kayiganwa is a retired Montrealer of Rwandan origin who shared her life story in 2009 as part of the Montreal Life Stories project. She has collaborated in the Atlas of Rwandan Life Stories since 2017 and worked closely with Élise Olmedo since 2020 on the co-construction of a *Subjective Atlas* of her own story (2023).

Ferran Larroya, Unversitat de Barcelona (Spain), is a physicist working on his PhD at the UB Institute of Complex Systems. His research focuses on the study of human behaviour in the framework of Complex Systems Physics and especially on pedestrian mobility with data collected through citizen science practices in public experiments.

Salvatore Liccardo, University of Vienna (Austria), is a historian working on processes of identity formation in Late Antiquity, with a special focus on examples of lists of ethnonyms. His research also covers late and post-Roman geographical knowledge and imaginations, with specific emphasis on the analysis of the Tabula Peutingeriana.

Laura Lo Presti, University of Padua (Italy), is a cultural geographer and (co)author of over 40 articles, chapters, books and other essays that explore cartography through theoretical and methodological contaminations coming from visual studies and contemporary art, mobility and migration studies, and critical theory.

Chris Lukinbeal, University of Arizona (USA), is a professor of geography and founding director of the Geographic Information Systems Technology Programs. He is the past president of the Association of Pacific Coast Geographers, an associate editor for *Geohumanities*, with books on media's mapping impulse, mediated geographies, place and television, and the geography of cinema.

Tommaso Morawski, Bibliotheca Hertziana—Max Planck Institute for Art History of Rome (Italy), obtained his PhD in philosophy and history of philosophy at Sapienza Università di Roma in 2017. His major research foci include aesthetics, German Enlightenment (especially Kant), philosophy of cartography, space, imagination and media theory. He is member of the editorial board of the international journal *Pòlemos. Materiali di Filosofia e critica sociale*.

Contributors

Julien Nègre, École Normale Supérieure de Lyon (France), is an associate professor of American Studies and a junior fellow of the Institut Universitaire de France (IUF). His research explores the place of cartographic documents in American literary history. He is the author of a book on Thoreau's maps and of articles on William Byrd, Cooper, Melville and Kerouac.

Taien Ng-Chan, York University (Canada), is a writer and media artist working with emergent technologies (such as VR/AR or locative sound) and experimental mapping processes. In addition to her creative and scholarly essays, she has written for stage, screen and radio and exhibited in film festivals, conference events and art galleries internationally.

Élise Olmedo, Concordia University (Canada), is a postdoctoral researcher in geography. Her research focuses on the development of the concept of sensibility mapping ('Cartographie sensible' in French) by building bridges between mapping practices and the worlds of sensibility, emotion and intimacy, and between research and creation.

Roger Paez, ELISAVA Barcelona School of Design and Engineering, UVic-UCC (Spain), is a PhD architect working at the intersection of design, architecture and the city, focusing on temporality, experimentation and social impact. He is author of several publications where he explores maps as design tools in the expanded field of spatial design.

Davide Papotti, University of Parma (Italy), is a cultural geographer whose work mainly focuses on literary geographies and geographical imageries. He studied at the University of Parma (BA, 1993), at the University of Virginia (MA in Italian literature in 1996), and at the University of Padua (PhD in geography in 2002).

Andrea Pase, University of Padua (Italy), is a historical and social geographer. His research interests concern, among others, the unfolding of modern state territoriality, with particular reference to the use of cartography in the process of establishing borders (in Europe and in colonial and post-colonial Africa).

Marie Patino is a graphics reporter at *Bloomberg News*, where she builds interactive data visualisations for the newsroom. She makes maps and writes about them for MapLab with Laura Bliss.

Davi Pereira Junior, Maranhão State University (Brazil), is a Quilombola intellectual, activist and anthropologist. His research interests include Black social movements in the Americas; Black community struggles for collective land rights; traditional peoples in Brazil; and the role of cartography for inequality and sustainability issues facing Indigenous and Black people.

Josep Perelló, Universitat de Barcelona (Spain), is a full professor and researcher at the UB Institute of Complex Systems. He is the research leader of OpenSystems, a pioneering research group in the field of citizen science conducting public experiments in collaboration with artists, designers, museums and cultural festivals.

Giada Peterle, University of Padua (Italy), is a cultural geographer working on graphic geographies, art-research collaborations, narrative geographies and mobilities. She authored

the book *Comics as a Research Practice: Drawing Narrative Geographies Beyond the Frame* (2021) and is the director of the Museum of Geography of the University of Padua.

John Pickles, University of North Carolina at Chapel Hill (USA), is the D. W. Patterson distinguished professor of geography and international studies. His work focuses on cultural and social theory, the political economy of development, economic integration in post-socialist Europe, and the politics of mapping and border-making.

Amy E. Potter, Georgia Southern University (USA), is a cultural geographer working in the area of tourism geographies, particularly the intersections of tourism, memory and race. She is the author of over 30 publications including co-editor of *Social Memory and Heritage Tourism Methodologies* (2015).

Claire Reddeman, University of Manchester (UK), teaches digital humanities and art history, with interests in digital cultural heritage, visual methods, mapping, contemporary art and ‘ways of seeing’ using new technologies. Claire’s monograph *Cartographic Abstraction in Contemporary Art: Seeing With Maps* (2019) uses artworks to critique capitalist modes of abstraction.

Les Roberts, University of Liverpool (UK), is a reader in cultural and media studies in the School of the Arts and co-director of the Centre for Culture and Everyday Life. His most recent publication is the monograph *Posthuman Buddhism and the Digital Self: The Production of Dwellspace* (2023).

Piera Rossetto, Ca’ Foscari University of Venice (Italy), is Rita Levi Montalcini assistant professor in Hebrew language and literature. She holds a PhD in social and historical anthropology and in languages and civilisations of Asia and North Africa. She is interested in Jewish post-colonial migrations from the MENA region.

Tania Rossetto, University of Padua (Italy), is a cultural geographer working on geographic epistemologies, geovisualities, cultural cartography and urban studies. She is the author of *Object-Oriented Cartography: Maps as Things* (2019), where she explores the possibilities of a speculative-realist map theory by bringing cartographic objects to the foreground.

Paul Schweizer, kollektiv orangotango/University of Halle (Germany), is a geographer and popular educator. As part of kollektiv orangotango, he co-conducts collective art interventions in public space. He co-edited *This Is Not an Atlas* and curates the Not-an-Atlas-platform. Currently he organises mapping processes in Europe and Latin America to facilitate a global dialogue of engaged cartographies.

Jörn Seemann, Ball State University (USA), is a cultural geographer who has been teaching cartography for more than 25 years. His research interests cover a wide range of topics from cultural perspectives in cartography, map history, geographic thought and visual narratives to qualitative methods, cultural landscapes and cultural geographies of Latin America.

Tim Shea, University of North Carolina at Chapel Hill (USA), is an assistant professor of classical archaeology specialising in the art, archaeology and topography of ancient Greece

Contributors

in the archaic and classical periods. He is currently exploring how Athenian immigrant communities expressed their identities through tombstones and burial plots.

Bjørn Sletto, University of Texas (USA), researches environmental and social justice, informality, and insurgent and decolonial planning in Latin America. His particular interests include knowledge co-production in planning processes and the role of citizen planners in producing just and sustainable urban landscapes.

Manuela Valtchanova, ELISAVA Barcelona School of Design and Engineering, UVic-UCC (Spain), is a practising architect and a researcher working between politics, space and inter-subjectivity with a research interest in architecture of action. In her professional, academic and research career, she has developed different practices with a specific focus on temporary socio-spatial interventions and actions of spatial justice.

Toni Veneri, Wake Forest University (North Carolina, USA), is a literary scholar who conducts interdisciplinary research on early modern geographical and cartographical culture, exploring its environmental and artistic ramifications, especially in the Mediterranean. His publications include works on travel literature, maps and the imagination of the sea in Renaissance Venice.

Clancy Wilmott, University of California, Berkeley (USA), is an assistant professor of critical cartography, geovisualisation and design in the Berkeley Center for New Media and the Department of Geography. She researches cartography, colonialism, digitalities and spatial practice.

Bo Zhao, University of Washington, Seattle (USA), is a critical GIS scholar working on emerging GIS technologies and their social implications. He proposed a humanistic GIS agenda and urges geographers to examine deepfake geography, where he calls for more critical and ethical approaches to detecting and preventing spatial misinformation.

INTRODUCTION

Why Cartographic Humanities?

Tania Rossetto and Laura Lo Presti

Humanistic map studies: an expansive field

The humanities have been part of geographical knowledge and its expression for centuries, finding in maps and cartographic imaginations useful and intimate companions to reflect with, challenge and advance new spatial paradigms, methods and metaphors. After the more recent rise of the ‘spatial turn’ in the arts and humanities and the proliferation of digital technologies in several cultural domains, new research areas such as spatial digital humanities, geohumanities, deep mapping and map art, to name a few, have shown that the engagements of scholars and practitioners with cartography and mapping practices have expanded further, becoming increasingly diverse and highly mutable. In parallel to the growing fascination with cartography that arose within various humanistic fields, in the last 15 years, we have witnessed the emergence of ‘map studies’ as a transversal research area that is strongly affected by humanistic approaches and methodologies. This area intersects not only more established traditions such as the history of cartography and critical cartography but also the multifaceted realm of ‘cultural cartography’ (Cosgrove, 2008). The *Routledge Handbook of Cartographic Humanities* is precisely designed to explore the intersection and convergence between cultural map studies and the humanities, expressing multifaceted traditions and inclinations coming from different disciplinary, geographical and cultural contexts. Various humanistic understandings of maps have been published, yet often they have been presented as ancillary to the core cartographic content of a book or treated within a single humanistic domain (e.g. art and cartography; literature and cartography; media and cartography). Here, a broad humanistic gaze is adopted not just to show how cartography traverses distinct disciplinary fields of the humanities but also to suggest foundational nodes, shared instances, ongoing contradictions, recurring interrogations and present urgencies emerging within the developing global arena of humanistic map scholarship.

In inviting our contributors and assembling the handbook, we reflected on the point whether each singular nexus that currently entangles cartography with a humanistic field could be reframed under a broader but peculiar theoretical and practical space of encounter: the cartographic humanities. In parallel to the geohumanities (an umbrella term that embraces the growing interdisciplinary engagement between geography and arts and

humanities scholarship and practice), the ‘cartohumanities’ explore how cartographic knowledge is advanced across the humanities and how, vice versa, map scholarship contributes to the human sciences. Consequently, in our view, the cartographic humanities is an ‘expansive’ concept rather than a comprehensive, finite one. Working expansively rather than comprehensively means, in fact, that there is potential space and time for cartographic humanities to grow further and include always new mapping theories, methodologies and empirical works rather than defining the boundaries and centre of this new territory once and for all.

This handbook comes several years after first attempts to focus ‘map studies’ and collect foundational works on maps, such as *Rethinking Maps* (Dodge et al., 2009) and *The Map Reader* (Dodge et al., 2011), which were followed by the more recent *Routledge Handbook of Mapping and Cartography* (Kent and Vujakovic, 2018) and *Mapping Across Academia* (Brunn and Dodge, 2017) volumes. The *Routledge Handbook of Cartographic Humanities* now offers the possibility to trace and gauge, after more than a decade, the value and expansion of map studies, exploring the charming ‘figure of the map’ (Mitchell, 2008) in the humanities while giving visibility to a growing vibrant network of map researchers with diverse disciplinary backgrounds. Acknowledging the importance of merging cultural cartography with other academic fields, we aim to provide a kind of intellectual ‘infrastructure’ (Lo Presti, this volume) to navigate core theories, critical concepts, phenomenologies and ecologies of mapping, while also providing insights into exciting new directions for future scholarship on the broader frame of the cartographic humanities.

Being in dialogue with ‘all the humanities’

Interviewed by John Fraser Hart at the University of Minnesota on 24 April 1972, about the meaning of the phrase ‘humanistic geography’ (distinct from ‘human geography’), Yi-Fu Tuan responded that he meant ‘an explicit recognition or ultimate interest in the human condition’ and a consequent ‘general interest with all the humanities’.¹ By associating geography with cartography, one could see the cartographic humanities simply as a byproduct of the now established geohumanities (Dear et al., 2011). Yet, as masterfully highlighted by della Dora in the opening chapter of this handbook, the phrase ‘cartographic humanities’ expresses a peculiar tension, one which can be found in the very act of ‘humanising the map’ (della Dora, this volume). In fact, while we are stressing how much cartography and mapping are today greatly valued within several cultural domains, we should not forget—as several of the chapters included in this handbook demonstrate—that maps have always been, and still are, contradictorily understood within the humanities.

One of the most common critical and sceptical considerations deriving from this contradictory view is that western mapping practices are inherently irreconcilable with the expression of human experiences and emotions. Expressive forms, such as writing, painting or photography, have been considered more apt ways of grasping the human condition: the map is detachment, whereas narration is involvement; the map is an act of measuring, whereas art has the power to reveal the nuances of human life; maps communicate spaces of homogeneity, whereas literary texts convey variations of human sentiments. Significantly, one of the early reactions of geographers when the idea of mapping literary works was advanced in the well-known *Atlas of the European Novel, 1800–1900* by Franco Moretti (1998) was to criticise this act as an attempt to apply a Cartesian grid to literary texts, thus neglecting the qualitative dimension of both textual and real places acknowledged

by human geography (Rossetto, 2016: 261). Italian geographer Claudio Cerreti (1998), for instance, saw Moretti as influenced by spatial analysis rather than geography, with his denotative geometry of the *extensio* of spatial relations being far from a geography of the connoted *intensio* of places. Cartography, in summary, was seen as ‘less human’ than either geography or literature.

While the unmappability of literature is still a hotly debated issue, literary scholars have come to adopt nuanced, complex and productive approaches towards the relationships between cartography and map studies (see for instance Nègre, this volume; and Bushell, this volume). Yet it is not the case that when cartography is generally linked to the humanities, the association is most frequently presumed in technological terms, with reference to literary or historical geographical information systems (GIS) or other applications involving geolocated data. Significantly, when delineating the resurgence of some ‘geographical primitives’ within the newly established geohumanities, Hawkins (2020: 97–98) includes the idea of ‘location’ among such returned primitives. Attributed to ‘that *cartographic* imperative that drove the discipline for centuries’ (italics added), she sees the idea of location as now re-emerging in the context of the GIS-based digital humanities, ‘which ensured that location is a crucial part of how the humanities are thinking about space and place’ (Hawkins, 2020: 97–98). Yet this could lead one to think that cartography is nearly entirely inherent to forms of ‘digital geohumanities’ (Travis, 2020). Indeed, our delineation of the cartographic humanities obviously includes digital culture in a pervasive way (see in particular Part 4 in this volume), but it remains distant from a more tech-oriented application of cartography and GIScience, which is typically associated with the digital humanities. By being practised within a wide range of disciplines and fields—such as cultural geography, literary studies, history, philosophy, classical studies, archaeology, anthropology, film, media and visual studies, curatorial and art practice, architecture, ethnography, digital culture, political and post-colonial studies, among others—the cartographic humanities eludes a reductive affiliation to the digital humanities and shows the capacity to be in dialogue with ‘all the humanities’, as Tuan would say.

The productive contradictions of the cartohumanities

As we have seen, ingrained views on cartography (Edney, 2019) often bring with them a series of tensions, contradictions and binaries—the quantitative and the qualitative, data and feelings, the mathematical and the discursive, the abstract and the embodied, cartography and chorography, rationality and creativity, exactness and impression, to name a few—which are also reflected in several of the chapters of this handbook (see for instance Arce-Nazario et al., this volume; or Luckinbeal, this volume). As Crampton (2010: 56) reminded, while it was modern cartography that identified a scientific divide between the ‘proper’ and the ‘transgressive’ map, it was Harley (1989) who identified the (detrimental) tendency to apply binary thinking to maps and the delineation of cartography as a discourse of opposites (see also Kitchin et al., 2009: 2–4). The point of view of the cartographic humanities, to recall the expression used in a seminal article that largely contributed to opening up the perspectives of map studies 20 years ago (Del Casino and Hanna, 2005), is fundamentally to stay productively ‘beyond the binaries’. The cartographic humanities, in fact, stems from the recognition that the complexity of the cartographic realm requires not only multidisciplinary investigations but also theoretical and methodological pluralism and inclusiveness. As Roberts (2012: 12) now famously put it, ‘there is so much more to say

about mapping than is often said in cartographic circles'. He noted that although the use of the cartographic lexicon by non-geo/cartographers

has its problems and frustrations . . . at the same time the semantic ambiguity that has arguably dogged theoretical discourses in recent years presents us with challenges that can enliven and enrich, rather than inhibit, critical understandings of cultures of mapping.

(Roberts, 2012: 11)

Indeed, this messiness is a clear symptom of what Lo Presti (2018) called 'an extroversion' which currently characterises cartography and mapping. The encounters between cartography and the humanities help in enlarging the horizons of map thinking, showing how maps are, and have always been, often simultaneously—rather than in oppositional ways—representations, practices, powerful devices, material objects, cognitive tools, embodied things, works of creativity, emplaced actions, living entities, technological machines, networks of feelings and much more. The recent multiplication and expansion of cartographic worlds, repertoires and phenomenologies that we encounter in our particularly 'rich cartographic culture', as Cosgrove (2008) suggested, have only made more palpable this need for a pluralistic, and humanistic, study of maps.

In this light, we see the cover of our handbook as particularly expressive. It portrays a work by artist Fabio Roncato from the series *Beneath the Lines*, which was created after his residence at the Museum of Geography of the University of Padua, with which the editors and two of the contributors (Giada Peterle, director of the museum, and Andrea Pase) are affiliated. The concept underlying this and other future artist residences of the *MAP-PArti* project (curated by Giada Peterle and Giovanni Donadelli since 2023) is that of creatively mobilising a storage of topographical maps edited by the Italian Istituto Geografico Militare destined to pulping. By transforming the map sheet into a sculpture realised by merging hands in clay and then filling the groove with loam and chalk, Roncato evokes not only the extractivist impulse but also the wrapping visceral relationship with the Earth that cartography performs. In the photograph, behind this unorthodox, somehow irreverent but extremely fascinating treatment of the topographic map, we see a nineteenth-century globe, the reproduction of a modern planisphere and some shelves with rare books in the background of the Sala della Musica, the museum room that preserves some of the most prestigious historical cartographic objects of our university. This image represents for us a plea for an open, plural perspective that fosters exchange between the more established and the more effervescent variations of humanistic research on maps.

The need for multidisciplinary pluralism in cartographic research was also early recognised by Monmonier (2007: 371), who wrote about the emergence of a 'humanistic turn' in cartographic scholarship with reference to a variety of 'publications reflect[ing] a dimension of cartography concerned more with the appreciation and enjoyment of maps than with the more traditional technological and methodological agendas of academia'. Yet we could also mention here the impatience expressed 20 years ago by Pickles (2004: 19), who made an inspiring claim for a multivocal, more-than-critical study of maps:

The still deeply rooted desire for totalising monochromatic accounts that explain the map in terms of it being a socially produced symbolic object, a tool of power, a form derived from a particular epistemology of the gaze, or a masculinist representation,

seem to me to miss the point of the post structuralist turn: that is, that not only are maps multivocal . . . but so also must be our accounts of them.

In tune with, and inspired by, such early calls, this handbook is aimed at showing how map thinking and cartographic research have benefited from the mutual exchange with the humanities in responding to such impatience and enjoyment and how the development of the cartographic humanities can provide a promising platform to further advance map theories, methodologies and empirical explorations through open-ended paths.

Handbook overview

This handbook opens with Part 1, which moves from the depths of the humans-maps relation—considering both the temporal depth of such complex relation and the implication of inner human worlds—to the posthuman dimension. Moving also from the intimate to the collective, such relation involves not only the most profound subjective experience but also society and the Earth. Taking together reflections that run from antiquity to the future of humanity, Part 1 suggests that a multidisciplinary perspective within the humanities, in dialogue also with the social sciences, helps in bringing together chronological distances, introspective instances and social engagements. This is also made possible by a post-representational appreciation of maps of the past, the present and the future, an approach that stems from the more recent map thinking and that underlies the handbook as a whole. **Veronica della Dora** offers a foundational opening to both the field of study and the approach of the cartographic humanities, taking allegorical maps of life as a site to reflect on how cartography and the humanities are in no way antithetical. **Javier Arce-Nazario**, **Janet Downie**, **Tim Shea**, **John Pickles** and **Toni Veneri** draw from multidisciplinary conversations to reframe the ‘chorography and cartography’ opposition in ways that reveal the hermeneutical potential of ancient and contemporary conceptions of chorography and revive its language in a time of spatial humanities. **Matthew H. Edney’s** chapter reflects some crucial aspects of current cartographic theory questioning the universality of mapness and cartographic language to endorse a processual approach that grasps the endless historical and cultural variations produced by mapping practices and the assemblages through which they materialise in the world. Highlighting the anthropological and phenomenological underpinnings of a conception of maps as mapping practices, **Les Roberts** elaborates on the fortunate yet elusive concept of deep mapping and the paradoxical, poetic and productive sense of *unmappability* of the human world it conveys. **Paul Schweizer** and **Severin Halder** from *kollektiv orangotango* open their intervention to social worlds and reflect on activist mapping, which is a vital trend today within the humanities that aims at contributing to the building of more just societies. From the humanistic attitude of self-reflexivity comes the need for stepping back to a truly engaged collective cartographic practice that is able to cultivate deeper caring relationships. Expressing a diverse but equally ethical preoccupation, in no less human ways, **Joe Gerlach** takes the reader to the rarefied territories of posthuman cartographies. Despite its being quintessentially anthropocentric, cartography is here considered in its capacity to generate attentiveness to the posthuman condition and transfigured into a reparative, therapeutic and caring gesture towards the Earth.

Part 2 of this handbook draws from the centrality of textuality within the fabric of the humanities, unfolding the potentialities of the Latin word *textus* as a piece of weaving. In addressing ancient, archaeological, historical or literary sources, these chapters also

consider the materialities and textures embedded in such texts and in the processes of writing, reading and interpreting. Leaving aside the theoretical conceptualisation of ‘the map’ to reveal more nuanced engagements with ‘maps’ and ‘mapping practices’, the chapters carefully handle fictional and non-fictional cartographies that work to expand our visions to include layers of time, mobile historical phenomena, unmappable terrain features and even animal point of views. This expansion is aided by an attitude appreciating slowness, contemplation, comparison and ethical reflection that emerges in the close reading of texts, material fragments, clues and traces found in the library, the archive or the archaeological site. While lingering on the specificity of cartographic or cartographically inflected documents, such contributions pay attention to the internal and external connections they activate with multiple contexts, thus seeing maps as always mapping entanglements. **Salvatore Liccardo** focuses on the interplay of texts, diagrams, memory and travel in late antique cartography, discussing the *Tabula Peutingeriana* as a vivid example of the eclectic entanglement and coexistence of signs and performative devices within a diagrammatic map. Re-reading critically the ‘mappification of archaeology’ and its impact on the discipline from its very beginning until recent times, **Piraye Hacigüzeller** discusses several notions of the map as a ‘craft’ with an urgent political ethos. Meditating on how archaeological mapping shapes humans just as humans shape archaeological things and maps, she provides the reader with creative and provocative examples that trouble the perduring cartographic traditionalism of the field, pointing to the material effects that archaeological maps and their mapmakers produce. Questioning the idea that historians are usually sceptical regarding cartographic language, since it seems to frame time in a static way, **Tiago Luís Gil** elaborates on the long tradition of movement maps in historical studies, showing and contextualising a wide repertoire of techniques and visual vocabularies regarding historical processes featured in printed and static maps. By exploring the fictional worlds of literary texts and paratexts through an ecocritical perspective, **Sally Bushell** highlights how cartographic contradictions have the power to disclose non-human, biocentric modes of spatial being, with the effect of generating empathetic engagement with animals. **Julien Nègre** adopts a processual approach in focusing actual cartographic documents used, read and annotated by writers, with examples from U.S. literary history. Being literary constraints or catalysts for literary creation, such maps crucially contribute to expanding the connections between the world evoked by the text and the reality inhabited by the readers. Taking inspiration from the philosophy of slowness, **Jörn Seemann** attends to the unfolding of mapping processes, which can be revealed by a slow attunement to reading maps. Stepping aside to approach maps with a slower pace may not only be an act of resistance but also the rediscovery of a pleasure, that of lingering on maps to sense their materialities, trace their histories and listen to their stories.

Part 3 of this handbook is centred on one of the most extensive areas of exchange between map studies and the humanities, one which considers maps and mappings from a medial perspective. If, on the basis of their communicative functions, maps have been thought of as media for a long time, it is only recently that the complexity of media theory and media studies has come to permeate map studies. This process has led to a growing interest not only in the medialities of maps but also in the interrelations between them and other kinds of media. The chapters included in this part oscillate between these two poles, providing both theoretical insight into cartographic mediality as well as studies of its intermedial relations with other media. Hosting a constellations of media and intermedial possibilities that reveal how a taste for maps populates imaginaries as well as cultures of consumption,

this part includes not only interventions on the more established binomial of cartography and cinema but also less common areas of research that play on the borders of cartography and unexpected forms of media. **Tommaso Morawski** opens this part by offering a philosophical reflection on the concept of cartography as a matrix of human imagination. A media-anthropological approach is applied to recognise cartography as a technology, and a necessary mediation, which plays a fundamental role in the constitution of the human and its cultural forms. **Giorgio Avezzi** reverses the common idea that cinema is a fundamentally cartographic medium because of its ability to represent the visible world in order to point out how cinema can be represented ‘as’ the world and therefore mapped in itself. He focuses on spatial interpretive categories such as world cinema and national cinematographies, as well as on the mapping of data that show territorial differences in audiovisual consumption and regional taste cultures. **Chris Lukinbeal** mobilises the paradoxical features of cartography arguing for an antithetical cartography that merges the scopic regimes and technologies of perspectivalism and projectionism. This rapidly developing antithetical cartography, or geospatial cinema, embraces cinema and cartography as mutually inclusive to produce geovisualisations that deploy cinematic form, language and scalar multivalence to analyse and render film location, production and consumption and much more. **Tania Rossetto** proposes three acts of map thinking that proceed from an engagement with three music videos. The music video morphes into a meta-map, a theoretical object that emanates different approaches to cartographic mediality as representational machine, lived practice and visceral thingness. **Davide Papotti** catches cartography in its leisure time, in contexts where it is freed from its usual and predictable functions. By analysing examples of print advertisements that feature maps while promoting objects or services other than maps, he appreciates the ways in which a taste for maps informs the imaginaries of western societies. **Roger Paez, Manuela Valtchanova, Ferran Larroya** and **Josep Perelló** consider the operative potential of maps in design practices. As a framing device and projective media, mapping can mediate existing site potentialities, inform urban visions and test potential realities, thus prefiguring how human habitats are perceived, construed and imagined.

Part 4 of this handbook is not aimed at delineating a separate category for the digital cartohumanities, since digitality inevitably pervades all the handbook’s content. Rather, this part is aimed at disclosing how a cultural cartographic perspective could be productive in researching the digital as a human experience. Digital mapping practices of the everyday, as well as those involved in research practices, are reframed under a humanistic lens that emphasises not only the force of current digital cultures but also idiosyncratic itineraries and positionalities in the digital environment. ‘Cultural digitalities’ in the cartographic humanities do not refer to a tech-based use of locational data in the humanities but to the development of a cultural attentiveness to a wide range of map-related phenomena, habits and events that interweave human subjectivities and non-human entities in a digital ecology. **Claire Reddeman** interprets the ‘blue dot’ of smartphone-based mapping apps, and the practice of making GPS selfies that record our location, in terms of a narcissistic projection of the self into the map. The ‘blue dot’ thus becomes a self-image, a way to depict ourselves that reveals the individualisation and solipsism of our spatial existence via maps in the digital era. **Sam Hind** considers the many forms of automation and the agencies of machinic entities that have come to characterise our navigational experience through map apps over time. He suggests how, far from de-humanising navigation, automation entails human labour, skill and activity and deserves a more-than-technical, cultural approach to be understood, also in its psychic and ecological costs. **Valentina Carraro** revisits critical

cartography through a techno-feminist approach. She draws from Donna Haraway's foundational works to highlight the iteration of the god-trick performed by contemporary geo-spatial software. She uses the concept of map fetishism not only to create critical awareness about it but also to raise hope in the insightful, useful, profound and transformative power of (digital) maps. **Mike Duggan** offers a historical overview of the use of 'ethnographic mapping' in research practices and concentrates on the more recent role played by digital and mobile mapping technologies in engaging with human lives and stories, as well as the recent trend of ethnographising mapping practices. **Bo Zhao** argues for a GIScience that incorporates a humanistic viewpoint to better navigate today's data-intensive society. Attending to the creative forces that spread through GIS and different types of human or non-human entities, he expresses ethical interrogations and caring stances through the four categories of embodiment, hermeneutic, autonomous and background GIS. **Tadas Bugnevičius** closes this part with a chapter in memory of Roland-François Lack (1960–2021), a humanities scholar who assembled a unique online collection of thousands of screen grabs from films featuring maps known as *The Cine-Tourist* website, now archived by the National Library of France. The practice of regularly posting cine-maps is viewed here as a counterpart of a teaching mastery as well as the manifestation of a deep, extremely refined, endless fascination with the lives of cartographic objects within filmic and digital environments.

Part 5 of this handbook addresses a number of relevant issues and urgencies in the critical consideration of maps and mapping. This part is not aimed at enclosing the critical, disruptive stance of map studies within a single container, since a critical attitude permeates a great number of chapters in the handbook. Rather, this part is aimed at highlighting a series of troubling political issues, deep-rooted inequalities and ongoing discriminations that have been, and still are, at the centre of critical cartographic thinking. Applying a humanistic sensibility to such critical thinking means mobilising conceptual creativity, historical sources, subjective and collective positionalities, evocative images and different kinds of cartographic as well as non-cartographic texts from different parts of the world in order to read the past while endorsing more just futures. **Andrea Pase** moves from a famous passage from Conrad's *Heart of Darkness*, where the young Marlow places his (white) finger on the blank spaces that still existed in the atlases of the second half of the nineteenth century and analyses two cartographic documents portraying inland Africa in the 1820s and 1920s to reflect on the racial cartographic filling of those blank spaces in the process of colonial appropriation. Discussing the ways in which cartographic sciences have shaped spatial representations and landscapes in settler-colonial societies, with reference to a case in Australia, **Clancy Willmott** argues that the inherent contradictions and limits of cartography facing the force and otherness of colonised material landscapes inadvertently transformed such cartography into a counter-colonial practice that still resonates today. **Davi Pereira Junior** and **Bjørn Sletto**'s intervention (with examples from Brazil) highlights that, by exercising the power to map under their specific epistemologies, ontologies and pedagogies, Indigenous peoples and Afrodiasporic communities demonstrate that cartography can be used to protect their rights to existence, territory and collective identities, providing an intergenerational and counter-hegemonic tool for struggling against various forms of silencing and oppression. **Stephen P. Hanna** concentrates on the counter-powers emanating from a nineteenth-century hand-drawn map included in a memoir written by a once-enslaved man in North America. The memory work done by this map entails not just a personal recovery of the experience of enslavement and emancipation by a Black cartographer but also a public practice of repairing over a century of erasure of race-based slavery

from local official history and landscape heritage. **Christina E. Dando** provides an overview of the gendering of cartography as a masculine knowledge, illuminates the protagonism of women's mapping in the United States since the nineteenth century and then offers a close reading of the female/feminist worldview (including the humorous nudity of a man) emerging from a pictorial map created by the American Association of University Women in a campaign to support women's education in the late 1920s. Finally, **David Chandler** discusses the process of emptying out space of its inherent inter-relationalities induced by modernist conceptions of cartography, arguing that mapping has become instead central in the Anthropocene precisely in recognition of such relationality. Seen from an ontopolitical perspective, mapping turns into a mode of governance, a tentative non-linear adaptation to emergent social, economic and environmental conditions and disturbances.

Part 6 of this handbook revolves around the growing amount of literature and creative experimentation that involve mapping in practices of eliciting individual life histories, collective identities and self-accounts. Rather than working in the archive, in the library or in media environments, humanities and social sciences scholars here work in the field, in direct contact with individuals and groups to collect—and often co-produce—spatial narrations, memories and feelings through several creative, non-Euclidean, alternative forms of mapping. Maps therefore become points of contact and of empathetic exchange of looks and interactions of bodies that stimulate listening to one another. While some of these research gestures are aimed at revealing historico-political dynamics and related collective suffering, producing social impact and creating public awareness, a humanistic attitude ensures that there is also room for purely theoretical ruminations, fictional narrations, solipsistic fantasies and inward interrogations. **Élise Olmedo**, **Emmanuelle Kayiganwa** and **Sébastien Caquard** trace the history of the collaboration between a Montreal-based survivor of the 1994 genocide of the Tutsi in Rwanda and two researchers in order to reflect on the notion of the cartographic co-construction of memories, thus unfolding the back-and-forth processes employed over time to involve the storyteller in a sensitive mapping practice and share her life story and difficult experiences. In reading the history of contemporary Jewish migrations from North Africa and the Middle East across the Mediterranean through an anthropological lens, **Piera Rossetto** sees cartographic research creation within ethnographic work as a way to train the art of listening to diasporic recollections, as well as an opportunity to share with wider audiences such histories and particular stories through creative collaborations and outcomes. Reporting examples of body cartography projects created by bachelor students enrolled in a humanities degree programme, **Laura Lo Presti** exalts humanistic mapping as a creative platform through which difficult stories related to psychological and bodily traumas can be more easily shared. Here, the map develops as an infrastructure of feelings, betraying the unspoken aspiration of emotional mapping in order to become a cathartic form of public intimacy, an auto-cartography where people can lay bare their problems and innermost thoughts to others through a mediating image, without exposing themselves directly. **Giada Peterle** considers instead auto-cartography as a prolific encounter between autoethnography, fictional writing and narrative approaches to maps as research methods. Two pieces of auto-cartographic and carto-fictional writing show how the *self* that is narrated and examined could be either the researcher(s) producing, analysing, using and engaging with the map in the field or the map itself, through forms of creative non-human narration. **Nancy Duxbury** and **W. F. Garrett-Petts** offer an overview of participatory cultural mapping as a conversational platform and meeting place for discussion, empowerment and co-creation between diverse stakeholders. Whereas the vernacular

cartographies stemming from community–academe collaborations hold the potential to represent the cultural dimensions of a place expressed by local voices, they require critical awareness, ethical cautions and epistemic contextualisation (within the wider cultural mapping field) to be carried out in meaningful and transformative ways. Drawing from an example of guided tours in plantation museums across the southeastern United States, **Stephen P. Hanna**, **Amy E. Potter** and **Derek H. Alderman** propose narrative mapping as a reiterative mobile methodology that captures the bodily performances of visitors touring historical sites and the unpredictable stories that emerge as these visitors journey through curated spaces, exhibited memories, material objects and public narratives.

Part 7 of this handbook engages with a variety of ways in which we can think of maps in the public realm. Since ‘going public’ has become an imperative within the humanities, maps have shown an enormous potential in engaging people and producing public outreach for cultural institutions such as universities, libraries or academic associations. Mapping, then, is very much practised in community services to support public actions. This part works to widen further the notion of mapping for the public by including a humanistic reading of the role maps played and still play in the public sphere and the public space, in the commercial realm and the information system. Being alternatively—and often simultaneously—commodities, tools of emancipation, informational devices, material artefacts and carriers of political views, maps pervade our lives as well as public arenas shaping a variety of cartographic practices and cultures. **Martin Brückner** reflects on the public life of maps from a historical and material perspective, showing how from the beginning of early modern cartography printed maps emerged as social artefacts transcending the goals of spatial orientation or representation. The cartographic and non-cartographic uses of such ‘cartifacts’ thus intersected, as cartographic commodities—and their biographies—variously resonated with audiences through public spaces, ritual actions, social interactions, pedagogical contexts or sentimental intimate experiences. Acknowledging that maps are often a strong exhibiting medium, **Tom Harper** examines the history and present of public map exhibitions. With particular reference to the activities of the British Library, by critically considering the host institution, the exhibition curator, the exhibited collection and the audience, he interrogates the measures of their success, and their future potentialities, reflecting on how such map exhibitions create knowledge following particular strategies, can not only reproduce the biases embedded in their exhibited collections but also operate as forces for change in societies. **Barbara Brayshay** and **Aldo de Moor**’s chapter presents a participatory mapping project undertaken in the Black Caribbean community in the London Borough of Lambeth commissioned to create a map of community support available to unemployed people. While, through storytelling, the marginalised community took stock of its issues and the available support services, network mapping transformed into a practical means for public action, thus inspiring a model of bridging the divide between community members, community support services and wider networks of external institutions and agencies. **Taijen Ng-Chan** elaborates on the new meaning of ‘art’ in relation to the discipline of cartography and shows how scientific associations find in the arts and humanities a particularly rich terrain to cultivate public outreach. Her chapter traces the development of the International Cartographic Association (ICA)’s Commission on Art & Cartography, which works to activate hybrid artistic-cartographic practices, promotes spatial awareness and facilitates public events, collaborations and the international exchange of ideas among diverse practitioners and theorists. **Laura Lo Presti** and **Tania Rossetto** adopt an ethnographic approach to dig into cartographic authorship and

its public dimension. Collecting interviews with Laura Canali, a designer of maps for an Italian geopolitical magazine, they investigate how the public impact of maps in a ‘hot’ topic such as that of geopolitics is deeply felt by the mapmaker, as well as the decisions, ethical interrogations and precariousness always implied in the crafting of geopolitical maps. In an interview conducted by the handbook’s editors, Bloomberg journalists **Laura Bliss** and **Marie Patino** talk about MapLab, a newsletter launched in 2017 and published by Bloomberg CityLab which covers the world of mapping and how it intersects with the news not only for an audience of professionals interested in geo-datavisual graphics but also for map lovers in general. They regularly highlight mapping projects that provide important perspectives on key news events and topics such as climate change, elections, geopolitics and urban planning, but they also write about how cartography illuminates everyday human experience, as in the case of the *How 2020 Remapped Your Worlds* initiative during the coronavirus pandemic.

With its desire to situate cartographic thinking and praxis historically, philosophically, empirically and in terms of changing disciplinary practices, this volume vibrantly shows how encounters between map studies and the humanities have produced ‘something’ that no longer belongs to them but instead exceeds them: the cartographic humanities.

Note

- 1 The interview is included in a recent video released for the memorial session dedicated to Yi-Fu Tuan at the Association of American Geographers’ 2023 annual meeting in Denver. The video is available at www.youtube.com/watch?reload=9&v=TiAdu_DZVKc.

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PART 1

Preludes and trends



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1

MAPPING INNER WORLDS

Cartography as a humanity

Veronica della Dora

He who has succeeded in seeing himself is better than he who has been graced with seeing the angels.

—*St Isaac the Syrian*

Introduction

The phrase ‘cartographic humanities’ evokes a tension between the order imposed by the map and the complexity of what makes us human. On the one hand is the synoptic view from above, unveiling spatial patterns and making the world legible to our eyes. On the other hand is the unfathomable mystery of the human Self. The detached cartographic view implies absolute synchronism and mastery. It presents us with a frozen image of the world, with the illusion that time has stopped, that space has shrunk before our eyes and that we are in control of both. The invisible flows of human life, emotions and desires, the endless transformations of the self, the inscrutable depths of the soul, by contrast, can be hardly pinned down or even grasped. Like time and infinitude, they elude the gaze and resist representation. Self-knowledge seems to belong to the realm of abstraction rather than to the realm of images. Yet cartography and the humanities are in no way antithetical: in helping us find our place in the world, maps tell us much about ourselves. If approached as cultural artefacts rather than simply as scientific documents or practical wayfinding devices, they can offer privileged windows on the values and beliefs of their makers and their societies. Shaping worlds and worldviews, they are moral projects at heart.

Maps enable us to visualise what our eyes otherwise fail to grasp. They create visual links between interior and exterior worlds. Nowhere are these links more explicit than in allegorical maps of life. While metaphors such as *navigatio* or *peregrinatio vitae* stretch all the way back to classical and late antiquity, they started to assume cartographic contours only in early modern times, flourished in the Enlightenment, declined after World War II and resurrected in the twenty-first century. This chapter considers maps of human life and of its regions as a starting point for reflecting on the meaning of cartography as a humanity.¹ It shows how allegorical maps not only speak of shifting social and cultural values in the West, but they also reflect changing perceptions of space, of life and of the human Self.

Such aspects lie at the core of the humanities both as a set of disciplines concerned with the study of human nature and culture and as a specific approach to knowledge. Yet, what does this approach entail exactly? How are the humanities different from the sciences and the creative arts? And how have they historically related to cartography?

Cartography as an art and as a humanity

Arts and humanities designate different fields of human endeavour and achievement. The humanities emerged in the Renaissance from the study of the seven ancient liberal arts (the *quadrivium* of the mathematical disciplines of arithmetic, geometry, astronomy and music, and the *trivium* of the verbal disciplines of rhetoric, logic and grammar). They originally designated a class of secular studies concerned with human culture, in opposition to divinity. Today, the humanities are more often defined in opposition to the sciences and encompass a specific set of academic disciplines including, for example, languages and literature, history, philosophy and theology (Oxford English Dictionary—*OED*). More broadly, they designate an approach to knowledge characterised by interpretative rather than quantitative or nomothetic methods. The purpose of their study is still best encapsulated in the aphorism ‘*γνώθι σεαυτόν*’ (know thyself), and the belief that ‘we best come to that knowledge through the reflective study of exemplary human achievement’ (Cosgrove, 2011: xxii)—hence the strong historical dimension of humanistic studies.

The arts, by contrast, are a set of creative practices including, for example, creative writing, visual arts such as painting, sculpture and photography, and performative arts (drama, music, dance and architecture). As opposed to the self-reflexive and interpretative nature of the humanities, the arts place emphasis on practice rather than on commentary. In other words, they are concerned with creativity as such rather than with the interpretation of the products of human creativity. Creative arts were originally rooted in the *artes mechanicae* (or manual arts). In antiquity and in the Middle Ages, these were understood in opposition to the liberal arts, though by the mid-sixteenth century, artists were beginning to promote specific skills such as painting and sculpture as liberal arts, which were deemed intellectually superior and thus a more dignified home for artistic genius (Park, 2011). As opposed to the sciences, both the humanities and the creative arts indeed foreground the role of human authorship, either in the construction of knowledge and understanding or in the production of artistic crafts and performances.

An ambiguous term encompassing both the physical practice of mapmaking and its study, today cartography includes aspects that belong to both the arts and the humanities. Its relationship to both fields, and to the sciences, however, has changed over time. Whereas humans have produced maps since pre-historical times (Delano-Smith, 1987), ‘cartography’ is a relatively recent (western) invention. The word, which combines the Late medieval noun ‘*carta*’ (the material map object) and the ancient Greek verb *γραφειν* (to write, but also to describe), only appeared at the end of the eighteenth century. It gained traction in the following century and was eventually raised to the status of academic discipline between the 1920s and 1950s, though clothed in the mantle of science, rather than as a creative art or a humanistic discipline (Edney, 2019).

Denis Cosgrove attributes the original appeal of the term ‘cartography’ over the more mundane ‘mapmaking’ to the professionalisation of map production at a time when ‘European states were developing topographic map series for the purposes of defending territory, and using statistical mapping as a bureaucratic, regulatory and planning device’

(2008: 169). It was, however, not until the 1950s that the growth of academic cartography was accompanied by a broadened definition of the field, including writing *about* maps (Edney, 2019: 119). A decade thereafter, map historians were considering how early cartographic representations might be studied as part of the humanities, not just in providing data for other disciplines, but as objects of study in their own right (Edney, 2016).

While since the 1990s increased access to digital data, user-friendly mapping software and web resources have led to a ‘democratization of mapping’ (Crampton, 2010) and to a decline in the art of traditional mapmaking, map history has seen a new rapprochement to the humanities. It has expanded its focus from technical considerations to a critical reevaluation of maps as instruments of power (Harley, 1989; Wood, 1992) and cultural artefacts able to shed light on past societies and cultures in a way not dissimilar from a painting or a novel, for example (Cosgrove, 2008). Both ‘critical cartography’ and ‘cultural cartography’ rely on approaches and methods routinely employed in the humanities, such as commentary and criticism, iconographic analysis and, more recently, phenomenology (Rossetto, 2019; Jacob, 2006). The link between maps, the arts and the humanities, however, has deeper roots.

In the premodern and early modern world, mapmaking fell under the remit of Geometry, the liberal art concerned with the measurement (*μετρία*) of the earth (*γη*). The fifth-century polymath Martianus Capella described Geometry as a distinguished-looking lady wearing shoes reduced to shreds from her continuous wanderings around the globe, thus stressing its deep connection with the physical reality of the land (*De nuptiis* 6.583–87). By the fifteenth century, under the influence of Neoplatonism, the study of Geometry was deemed key to access the order underpinning the cosmos, which was understood as a reflection of divine love (Cosgrove, 1993; Mangani, 2018). For this reason, in the hierarchy of disciplines, Geometry was set closest to the pinnacle of Theology. Allegorical representations portrayed Geometria floating on a cloud suspended between two levels of being (physical and conceptual) (Figure 1.1).

Later representations, by contrast, featured her as a sturdy figure implanted on the ground and equipped with T-squares, plumb line, a globe, rules and castellated headdress, as to signal geometry’s allegiance with architecture, survey, navigation and other ‘middle sciences’ or practical mathematics, which were seeing a dramatic rise at that time (Park, 2011: 363).

Maps were nevertheless much more than practical devices at the service of architects, engineers and navigators. They were (and had long been) also didactic tools and moral projects. Bound in bibles, books of psalms or even set up as stand-alone altarpieces, medieval *mappae mundi*, for example, had for centuries provided visual commentaries chronicling human salvation from Creation to Christ’s Second Coming (Scafi, 2006; Woodward, 1987). *Mappae mundi* featured place events from biblical and classical pasts (from the garden of Eden to the encampments of Alexander the Great), the present (e.g. extant cities like Paris and London) and the future (e.g. the apocalyptic tribes of Gog and Magog). In this way, *mappae mundi* enabled viewers to find their place in the world and in universal history—and reminded them of the necessity of redemption.

In the Renaissance, Abraham Ortelius and other mapmakers explicitly connected their work to the humanistic tradition of self-knowledge. For example, *Theatrum orbis terrarum* (1570), the first printed atlas, presented the world as a stage for the lives, works and salvation of its human inhabitants, as witnessed from an elevated point above its surface in flux. By setting the spectator at a distance from the stage, Ortelius provided his audience with the necessary rational detachment to attain wisdom. At the same time, the opening world



Figure 1.1 *Allegory of Geometry*, Mantegna tarocchi, fifteenth century.
Source: Courtesy of British Museum



Figure 1.2 Abraham Ortelius, *Typus orbis terrarum*, 1570.

Source: Wikimedia

map in the atlas (*Typus orbis terrarum*) confronted the viewer with a vast antipodean continent yet to be discovered (*terra australis nondum cognita*) and therefore with the limits of human knowledge and the insignificance of terrestrial affairs (Figure 1.2). Under the empty white landmass, the inscription (from Cicero) reads:

For what can seem of moment in human affairs for whom who keeps all eternity before his eyes and knows the scale of the universal world?

For Ortelius, the earthly theatre and humans' place within it were to trigger moral reflection and self-knowledge at a time of devastating conflict in Europe (Cosgrove, 2003). Less than two centuries later, maps were not simply enabling learning and contemplation, but they were routinely providing practical guidance for navigating the manifold pathways of life and its regions. Where did these maps stem from?

The journey of life

Human life has long been narrated as a journey, or a voyage. Embedded in contemporary everyday speech, the image of the journey conjures up a sense of linear progression: 'moving through life', 'passing the hill', reaching 'a crossroads' and similar idioms all imply a forward movement. Like life itself, the journey entails a beginning and an end; a starting point and a destination. Life journey metaphors thus make it possible to map time on space,

and therefore visualise an invisible movement by way of familiar imagery. Here lies their timeless power to draw us near the great mystery of human temporality.

Ancient Greeks and Romans used sea voyage metaphors (*navigatio vitae*) to express the instability and fragility of the human condition or to illustrate the perils and difficulties of public and private life. Plato, the first Greek philosopher to use the metaphor, likened human doctrines to rafts upon which one precariously undertakes the voyage of life across the stormy seas of the world (*Phd.* 85c—d). Seneca likened human life to a voyage in which the soul is tossed by passions but reaches a quiet harbour towards its end, away from the turmoil and preoccupations of public life (*Brev. Vit.* 18). For Cicero, such harbour was death itself, the end of pain (*Tusc.* 5.117). For the Church Fathers, it was the kingdom of heaven and eternal life, the ultimate goal of every Christian (della Dora, forthcoming).

While they continued to employ the ancient sea imagery to describe the external contingencies of life, when it came to describe spiritual progress, the Greek Fathers turned to terrestrial topographies. They especially drew on the archetypal landscapes of the Old Testament: the austere wilderness, the fog-clad mountain, the impenetrable cloud and the cleft in the rock (*Ex.* 33: 21–23). Gregory of Nyssa identified these three topographic features with the purification from passions, spiritual enlightenment and the mystical union with God (*Vita Moys.*). Before him, Origen had singled out no less than 42 stops in the desert, each corresponding to a temptation to overcome or a virtue to gain on the way to God (*Or., Hom.* 27).

In the Latin West, Augustine envisaged human life as a *peregrinatio*, a journey of exile and return to the heavenly Father. His own path to conversion crossed barren ‘fields of sorrow’, ‘valleys of tears’, dangerous ‘mists of passions’ and the ‘muddy deep of heresy’, among other gloomy features (*Conf.* 1.16.26, 2.2.2). Inspired by Augustine, Dante likened life to a pathway he lost, ending up in a dreadful *selva oscura*, a dark forest where spiritual vision and the sunlight were blocked (*Inf.* 1.1–3). The Florentine poet mapped out his vertical journey of redemption through murky topographies of afterlife carved out of Italy’s mountain *loci horridi* (*Inf.* 12.1–13). In his *Pilgrim’s Progress* (1678), John Bunyan yet again unfolded the universal quest for salvation through an elaborated topography of hills, mountains and valleys, but this time also through the local town settings of daily life—from the village of Morality to Vanity Fair.

As all these examples show, inner journeys never take place through an empty space, but through complex, and usually vividly painted, topographies akin to the exterior worlds inhabited by the ‘wayfarers’. Unlike abstract space, places and landscapes make invisibilities palpable before our eyes, be they the ineffable passing of time, temporary states of mind, or otherwise ungraspable existential conditions. Inner topographies are laid out in a sequential manner, as one encounters them on the ground during a journey. The journey of life is thus ‘mapped’ in the metaphorical sense of the term, that is, as a cognitive, ordering process. Order is brought by the linear narrative running through and connecting qualitatively different sceneries and places. The movement of life and its inner topographies, however, started to be fixed on actual maps only in early modern times, after Geometria had ascended on her cloud. Interestingly, these maps spread as the art of mapmaking was turning into the science of cartography.

Mapping life journeys

Initially, allegorical maps did not aim at surveying life in its totality. They rather focused on one of its central regions: love. In the literary salons of mid-seventeenth-century France,