

Review of: Gillings, M., Hacıgüzeller, P. & Lock, G. (eds) (2019). *Re-Mapping Archaeology. Critical Perspectives, Alternative Mappings*. London: Routledge. 324pp, 14 chapters, 76 figures, 27 full-colour pages. ISBN 978-1-138-57713-8 (hbk); 978-1-351-26772-4 (ebk).

Shumon T. Hussain, David N. Matzig & Felix Riede

Re-Mapping Archaeology is a welcome addition to the emerging critical literature on archaeological practice and knowledge formation (e.g. WYLIE, 2002; CHAPMAN & WYLIE, 2014; PORR & MATTHEWS, 2019). The volume is a powerful, erudite and very timely call to arms for scrutinizing and deconstructing archaeological mapping and for promoting alternatives to traditional and rarely questioned map-making practices in archaeology. The volume raises three basic yet all too often underexplored questions and sets out to investigate them in a total of 14 comprehensive chapters:

1. What makes maps special and sets them apart from other visual research appliances?
2. What is the role and significance of map-making in the process of constructing, legitimating and disseminating archaeological knowledge?
3. And how can we improve and diversify the epistemic potential of mapping in archaeology?

Although at times challenging in its diversity and authoritative rhetoric, the volume is an impressive collection of thought-provoking contributions whose well-referenced nature makes *Re-Mapping Archaeology* an unusually rich resource of quotes, key readings and other bibliographic material. The volume is an important landmark for developing and strengthening reflexive strands of inquiry in archaeology and to broaden archaeological knowledge spaces. Notwithstanding its laudable ambition and unquestionable merit, however, *Re-Mapping Archaeology* is a rather Anglo-centric, and sometimes even British, enterprise; it is unashamedly motivated by the development of critical cartographies in the UK and US and an unmistakable product of the British theory-scape in archaeology – reflected most aptly in the Theoretical Archaeology Group (TAG) conferences and mirrored in the academic background of its contributors, but also in the conveyed literature as well as the conjured scholars and ideas. While this is not necessarily a shortcoming, readers should be aware that Continental European attempts to tackle the problem of the map and the fundamental epistemological implications of mapping – e.g. Arno Peters' *New Geography* in Germany (PETERS, 1983) or French *Graphic Semiology* (BERTIN,

1974), but especially more recent archaeological treatments of the issue (e.g. GRUNWALD, HOFMANN, WERNING & WIEDEMANN, 2018) – are hardly acknowledged or discussed.

The main thread running through the volume is a reflexive concern with the co-constitutive relationships between archaeological seeing, doing and knowing, and their reflections in map-making. Archaeological mapping, as a potent yet situated *way of seeing* (sensu BERGER, 2008), is criticized as a neutral scientific operation, analysed in terms of its implicit perpetuation, and sometimes furtherance, of power relations, prejudices and suppositions framing ongoing archaeological research and knowledge production. The volume seeks to break those bounds and open archaeological practice up for alternative approaches to spatial visualization and map-making. *Re-Mapping Archaeology* stresses the centrality of visual practice in archaeology and the need to dismantle the authoritative gaze (*le regard*) of the map (sensu FOUCAULT, 1975; cf. STURKEN & CARTWRIGHT, 2017, 103–105) in order to advance and deepen archaeological understandings of the human past and to tap into the unique potential of mapping as a 'technology of vision'.

The collection of papers curated by the volume is emphatically motivated by an attempt to overcome 'Cartesian' mapping practices – the objectivist and analytical rendering of maps, examined or mobilized as 'truth documents' (p. 236) – and to move beyond the tenacious paradigm of representation, so that archaeology can finally join forces with practice-based strands of so-called 'post-representational' cartographies (p. 2). The included papers share a discomfort with adequacy and precision as the guiding principles of state-of-the-art archaeological map-making, and castigate the supposed primacy of abstract mapping as opposed to emotive, narrative and experience-near mapping. The authors collectively diagnose an increasingly broad gap between the evidentiality of archaeological maps and the sweep of past human lifeworld experience. Cartesian maps, they mostly argue, misleadingly suggest that the nonliterate past can be portrayed without perspective or from a god's point of view bracketing all synesthetic human qualities (esp. p. 241). It is worth noting here that *Re-Mapping Archaeology* simply takes it for granted that approximating such lifeworld situations ought to be among the prime objectives of archaeology, without even considering alternative conceptualizations of the archaeological research project.

Re-Mapping Archaeology is organized in four main parts, introduced by an inspiring and thought-provoking manifesto for 'non-/post-rep-

representational' archaeological mapping by Mark Gillings and colleagues and wrapped up by a personal commentary by Monica Smith. The introductory manifesto firmly situates the volume within the dynamics of Anglophone academia, right at the intersection between visual studies, critical cartographies, feminist philosophy, heritage studies and post-colonial archaeology concerned with the agency of maps and other human material productions as well as the re-centering of subaltern, art-based and non-Western viewpoints and readings of the past. The manifesto calls for a fundamental rethinking of the archaeological map and its relationship with the archaeological imagination to disrupt entrenched yet rarely questioned disciplinary practices. Gillings et al. offer six assertions on which the project of non-/post-representational mapping may be based:

1. Maps are unstable and their nature, meaning and consequences are always context-dependent;
2. maps are a product of history and especially of research-history;
3. the modalities of map-making shape the potential utilization of maps;
4. the performative and affective qualities of maps are just as important as their visual effects;
5. maps are not just analytic but play a number of different roles in archaeological research, interpretation and dissemination; and
6. there should be no limits to what we consider mappable.

The first part reviews the history of map-making and map-use in British landscape archaeology (chapter 2) and archaeology at large (chapter 3) and introduces critical, feminist reflections on the practice of archaeological mapping (chapter 4). These chapters, albeit rather narrow in geographical scope, showcase the diversity and rich tradition of mustering maps in archaeology. Although the history of archaeological mapping is strongly linked to political history, especially the rise of Britain as a colonial power, there exists paradoxically 'no up-to-date book-length history of mapping in archaeology, despite the enormous importance of archaeological survey in the construction of the modern discipline' (p. 38 – but see GUPTA & MEANS, 2015, and contributions in their special issue). The key message is that archaeological maps often cloud and reify problematic assumptions and theories, advancing an agenda of their own: maps are always *in the service* of someone or something, consciously or less so. The careful scrutiny of archaeological mapping processes promises to reveal these unspoken agendas and to make

mapping more transparent. It seems important to consider here that maps are not just compliances of 'making visible', they also withdraw aspects of past reality from our view and therefore foster a 'misleading sense of "completeness"' (p. 28). To understand maps and what they can do for us, we thus need to understand what they hide and skew as much as what they depict and enable.

The second part (chapters 5 and 6) seeks to move beyond 'objective' maps defined as mere causal outputs of measurable archaeological input data, and to realign archaeological mapping with interpretive traditions in landscape archaeology, especially landscape phenomenology. The overall ambition is to incorporate experiential, subjective qualities of landscapes and other qualitative, scale-dependent observations into archaeological maps to enrich archaeological interpretations. The kind of interpretive mapping envisioned here requires the active engagement of a human subject (the archaeologist) with a dynamic landscape and is designed to counter supposedly 'dehumanized' readings of mechanically recorded spatial patterns. Michael Fradley and Tessa Poller, both using earthwork surveys as an example, underscore that maps can never be self-evident and digital technologies such as GIS and 3D-models should be deployed with providence and not theory-free or simply for their own sake, as their ease of use and speed risks detaching or even alienating the archaeologist from the archaeological feature itself (p. 112). Archaeology is re-cast as a constructive 'craft' here, rather than a documentary practice (p. 120-121), and inherited and often rigid conventions or styles of archaeological map-making are identified as obstacles to much-needed holistic understandings of past human spatial experiences (p. 134).

Part three of the volume hosts the most contributions (chapters 7 to 11) and tries to exemplify out-of-the-box thinking as well as experimental tinkering with archaeological maps. Many of the chapters employ arts-based or arts-inspired approaches and endeavour to break free of conventional mapping modalities. A central ambition is to 'step out of the [Cartesian] grid' (p. 149) and to explore other means of spatial visualization to reinvigorate the debate about space, time and movement/mobility in archaeology. The chapters probe new approaches to mapping such as collaborative or community-based mapping, deep-mapping, imaginative narrativization and experimental walking aimed at re-enacting past landscape expositions. They also reflect on historical mapping styles and figurative (rather than abstract) approaches to map-making in the hope of transforming the inter-

pretive possibilities of maps and enhancing their communicative versatility, including their capacity to explore spatial perspectives and subjective positionalities instead of eliminating them. A common thread here is to develop 'thicker' and more multi-faceted ways of seeing that acknowledge place-specific experiential relationships and the complexity of past lifeworlds (p. 206). The chapters also seek to promote a new vision of interdisciplinarity in which established boundaries of thought and practice are purposefully transgressed to disrupt common ways of doing and reading maps and to make space for something new. A guiding idea is the potential otherness and non-analogue nature of the past calling for a poignant divorce from taken-for-granted mapping procedures. The practice of mapping, in other words, needs to mimic a 'journey into another kingdom' (p. 216) to be able to reveal tropes of this otherness and to recover radical difference in the past. This expansion of the mapping space also involves the spatialization of *prima facie* non-spatial information such as sound, and to rethink the possibilities of mapping intangible qualities of experience. Mapping, from this perspective, emerges as a 'translational' practice (p. 231) rather than a reconstructive or descriptive endeavour.

The final part (chapters 12 and 13) of *Re-Mapping Archaeology* addresses the important issue of new digital mapping technologies and their epistemological consequences, intentional or not. These chapters take a critical stance towards the idea that progress in mapping technologies necessary leads to a progress in archaeological interpretation and understanding. Although the ongoing 'democratization' of archaeological mapping and cartography is deemed an overall positive development (p. 269), Christopher Green draws attention to the fact that the digital turn will almost inevitably lead to an *inflation* of maps and map-like visualizations, and can thus readily cultivate the false impression that map-making is a simple exercise without a lot of pre-requisites or serious caveats (pp. 285-287). His discussion raises the easily overlooked question of what constitutes a good map and reminds us that effective map-making requires a fair amount of technical know-how, visual competence, background knowledge about the mapped subject matter as well as a fair dose of contextual sensitivity – a map must answer to a research question and cannot stand on its own; we would add that it must also be responsive to the larger discursive context in which the map makes its appearance and is addressed. Taken together, the arguments presented here suggest that maps

often poorly serve the traditional purpose of hypothesis-testing and should rather be deployed as explorative devices in their own right, with interesting trade-offs between spatial variables such as scale, accuracy and precision.

Finally, Monica Smith's closing commentary offers a welcome contextualization of the foregoing individual chapters. Her emphasis on the inherent multiplicity, pluralism and the politics of map-making is convincing, yet also shows that *Re-Mapping Archaeology* has missed an important opportunity here: to map out the sociology and epistemology of archaeological map-making in more detail and to examine the consequences of this diversity for archaeological knowledge production and knowing. Smith adeptly highlights the many uses of maps – their ability to display and organize archaeological evidence or to help demonstrating and illustrating various knowledge claims – but also underscores that mapping is always a reductive, reality-compressing procedure and that this selectivity of maps opens up powerful interpretive avenues yet simultaneously introduces epistemological drawbacks. Smith further argues that maps have fundamentally different qualities than scientific texts – they e.g. lack direction and quotes or references – and therefore easily belie their legacy (p. 310): different mapping styles – in analogy to *styles of thought* (sensu FLECK, 1980; cf. BUENO, 2016) – speak of different communities of scientific practice and sometimes even distinct personal biographies, enforcing or subjugating specific narratives of the past. It is unfortunate that this last point is not really explored in a comparative fashion throughout the volume for unravelling the complicated history of archaeological maps and mapping styles must be a key objective of the larger reflexive enterprise within archaeology to which the volume so emphatically subscribes.

In total, *Re-Mapping Archaeology* represents a resourceful, challenging and timely collection of papers. The volume evokes a wealth of interesting questions, not eschewing difficult, at times uncomfortable issues or even strongly contested terrain and should thus steer the creativity and critical competence of its readers. Its individual contributions can be read as inspiring, often very personal essays showcasing the breadth and promise of charting alternative ground in archaeological mapping. Yet, measured by the six-point manifesto outlined in the introduction by Gillings et al., the volume only partially lives up to its own ambitions. To us, the most striking tension between the resolute call to arms issued by the opening manifesto for 'non-/post-rep-

representational' mapping in archaeology and the focus of the following chapters concerns the research-historical import of archaeological maps as well as the complex linkage between mapping modalities and the effective space of interpretive possibilities, both of which remain, in our view, somewhat underexplored overall. To be fair, this minor weakness is obviously a consequence of the strong emphasis placed on critical theory, art-based science and cartography, which generally foregrounds the exploration of alternative knowledge spaces rather than the in-depth analysis of research legacies and approaches applied routinely. Nevertheless, a little more groundwork on the epistemology and ontology of archaeological maps, and their specific histories, would have been helpful. What kinds of maps are commonly summoned by archaeologists? What kind of epistemic work do these different map-types do? Are there differences in how and which maps are mobilized within the research community? What is the relationship between mapping practices and archaeological theory and discourse?

Explicitly addressing some of these foundational questions would not only have broadened the scope of the volume and provided the opportunity to integrate insights from the ongoing 'visual turn' in the humanities and science studies (e.g. TOPPER, 1996; DASTON, 2008; COOPMANS ET AL., 2014), it would also have allowed the volume to more rigorously explore different *ways of seeing* and *looking* afforded by varying mapping practices and to productively tie in cognate work in art theory, sociology, philosophy and anthropology (cf. BERGER, 2008; GRIMSHAW, 2001; STURKEN & CARTWRIGHT, 2017). The opportunity missed here is to better theorize what maps *already do* and what kind of additional mapping functions and purposes are needed *given this diversity*. In so doing, the volume would have more convincingly framed and motivated the panoply of novel approaches that it then proceeds to offer. Especially the 'uninitiated' reader, who is not already sympathetic to the tenets, incentives and aims of critical cartography thinking, is likely to have a hard time here and will struggle to understand why these alternative mapping approaches are so urgently needed and what their place in the wider archaeological research landscape is. The recurrent and almost formulaic bashing of 'Cartesian' mapping does not really help here either and may even render the merits and goals of the volume less accessible; after all, traditional maps also serve good purposes and this could have been acknowledge more openly. The overly Anglo-centric architecture of the volume adds to this issue. In

our view, it is imperative for the critical enterprise to enter into a broad research-historical dialogue beyond the UK or the Anglophone world, and to firmly establish the variable and changing place of maps in archaeological knowledge formation in a more inclusive manner.

From a research-practical perspective, a huge problem is the opacity of maps and the fact that many maps are uncritically reproduced, quickly enter into a life of their own, and become incrementally modified to a point where it is difficult to reconstruct what they actually convey. The object biography of a small number of maps, in other words, often has disproportional effects on the direction and character of archaeological discourses and it seems extremely important and timely to us to finally address this issue. Yet, we can only ever hope to get to the bottom of these things if we begin to compare map-making and map-use *between* communities of scientific practice and carefully analyse them in relation to historically changing discursive formations. To this end, we have to build alliances and join forces not only with critical and reflexive perspectives in the empirical sciences, but also in the history and philosophy of science and the emerging science studies.

Relatedly, while the volume is an excellent antidote to naïve map-making and map-use in archaeology, it sometimes leads the reader astray by oversimplified strawman arguments and at times profoundly mischaracterizes state-of-the-art mapping practices in the so-called 'Cartesian' tradition. Distinctions such as 'objective' vs. 'subjective' mapping – rooted in the heated yet in part dated discourse on the difficult relationship between the sciences and the humanities – become increasingly problematic here. Feeding this perceived opposition masks much of the nascent variability of archaeological mapping and neglects the inherent complexities of past and present map-making practices, often guided by flexibility and pragmatism and adhering to the ideal of the bricoleur (sensu LÉVI-STRAUSS, 1969; cf. e.g. SANCHEZ-BURKS, KARLESKY & LEE, 2015) rather than the engineer. As most practitioners are well aware, outstanding and thought-provoking maps frequently represent hybrid and palimpsest entities that skillfully interweave analytic and interpretive elements and combine various techniques and imaging practices to achieve their larger visualization task. As such, many maps, more so than archaeological text, collapse long-standing divisions in scientific practice and open up new avenues of interdisciplinary collaboration beyond the exclusionary politics of C. P. Snow's (1998) 'two cultures'.

The persistent critique of 'Cartesian' mapping found in *Re-Mapping Archaeology* thus often takes part, if only unwittingly, in the same divisional practices, rather than conceiving of mapping as a unique meeting place for multiple strands of theory, practice and thought within archaeological research. The chosen emphasis and motivational background of the ambitious *Re-Mapping* project therefore unfortunately obscures the many opportunities of rapprochement, data integration and cross-paradigm cooperation that emerge when mapping is re-cast as an open ended, post-representational practice. Related to this footnote, specifically with regard to the digital applications mentioned throughout the volume, it may be added that at a time when Open Science principles (MARWICK, 2017) are beginning to put serious pressure onto archaeological research including map-making practices, a honest and more balanced discussion of how diligent data curation and presentation in map form would foster robust inter-subjective understandings and map longevity would have been welcome here.

Mapping is not a question of either/or, and due its non-textual, image-like qualities has great potential to bridge, complement and transform archaeological research perspectives. The Cartesian rhetoric that permeates *Re-Mapping Archaeology* draws archaeological mapping into yet another binary opposition, which is in itself Cartesian. It is regrettable that many contributions actively fuel this kind of partisan 'stereocasting' (HUSSAIN, 2019, 257) rather than seizing knowledge pluralism. Recent work in science studies, STS and the sociology and philosophy of science has clearly shown that we need to foster diversity in science and avoid erecting walls, which hinder communication and cross-pollination. There is a widely shared recognition now that theoretical, methodological and epistemological diversity best supports the knowledge goals of the wider scientific enterprise and that conceptually incommensurable research trajectories exhibit higher-order complementarities (e.g. CARTWRIGHT, 1999; CHANG, 2012; HACKING, 1996; KELLERT, LONGINO & WATERS, 2006).

The same is probably true for making, using and reading maps and the emphasis should thus be placed on the material, visual and epistemological *plurality* of map-use and map-making in archaeology, rather than foregrounding the salient epistemic interdictions of different mapping practices. While it can still be instructive to juxtapose and compare 'scientific' and other forms of map-making, and to critically investigate their consequences for knowledge production, 'scien-

tific' mapping should not be pitched against but instead *realigned* with humanistic and art-based mapping perspectives. Such rapprochement requires that both sides acknowledge their respective limitations and achievements, including the tremendous strides in data-driven map-making and visualization made in recent years within the scientific disciplines. Clearly, as *Re-Mapping Archaeology* powerfully admonishes us, mapping tasks, purposes and functions should be made explicit, but they must also be allowed to vary and they cannot be readily ranked by some universal quality standard.

Returning briefly to the issue of Open Science, we believe that the call for data-sharing and transparency within scientific archaeology and beyond can be a significant nexus of also re-thinking mapping practices and the notion of the map itself. The move to a more inclusive and participatory attitude within archaeological research not only promises to defuse the problematic opacity, legacy and authority of maps, it may even transform mapping from an individual, ego-centric practice to a collaborative, community-driven undertaking reflecting the long-term efforts of diverse groups of scholars who work together on a particular time period or research question. The map may then provide a tangible platform for cooperation that helps to coordinate different tasks and competences within team-based research. Rather than emphasizing the subjectivity and idiosyncrasy of map-making in the critical and art-based tradition, this approach to map-making stresses the reproducibility, interoperability and procedural qualities of maps as artefacts of specific research communities or programmes (sensu FLECK, 1980; LAKATOS, 1978). Making and using maps in collaborative, boundary-free science has important ramifications for our understanding of mapping practices in archaeology and challenges some long-held views about what a map is and wants.

In closing, we warmly recommend *Re-Mapping Archaeology* to all who are interested in mapping as an archaeological 'keystone practice' (SHANKS & WEBMOOR, 2010, 257) and to those eager to explore what may potentially lie beyond the everyday routines of the profession. At the end of the day, however, and like many edited volumes that arise from conference gatherings, *Re-Mapping Archaeology* feels more like a multi-stranded reader rather than a coherent, focused treatise. That said, the volume is certainly a valuable addition to the bookshelves of those interested in plunging into unsettling, provocative and experimental approaches to archaeological mapping. It is

full of inspiration to cartographic iconoclasts, yet even die-hard traditionalists may glean some important insights. To us, the significance of the volume lies, above all, in the emphatic clarion call for future research on the variable interweaving of archaeological mapping practices and knowledge production. We join this call and stress its many merits, hoping that *Re-Mapping Archaeology* will serve as an inspiration for many to re-assess and re-imagine the archaeological map, how it is made, used and read.

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Ass. Prof. Shumon T. Hussain
David N. Matzig
Prof. Felix Riede
Department of Archaeology and Heritage Studies
Aarhus University
Moesgård Allé 20
8270 Højbjerg
Denmark
s.t.hussain@cas.au.dk

<https://orcid.org/0000-0002-6215-393X>
<https://orcid.org/0000-0001-7349-5401>
<https://orcid.org/0000-0002-4879-7157>