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## Art, Science, Cartography, and the Eye of the Beholder

*Magnificent Maps: Power, Propaganda and Art.* By Peter Barber and Tom Harper (London, British Library, 2010) 176 pp. £29.95

For a number of reasons, the history of the map—both as text and image and as artistic practice, political project, and scientific accomplishment—is an exceptionally vibrant interdisciplinary field. Maps are a more ancient form of inscriptive communication than even writing is. They combine technical skill with cultural expression. But they are by no means a mirror image of the world or parts of it; the notion of the map as mimetic is a myth. What maps really do is to help constitute the world and images of it for particular purposes.

To historians of art, maps are painterly and graphical objects, the iconography of which reveals much about social authority, political patronage, networks of influence, and courtly power. To historians of science, maps are powerful tools for understanding relationships across space and time. Crucial as they are to geographers, maps are of no less relevance to literary scholars interested in styles of writing, or historians of empire looking for insights about territories imagined, occupied, and contested. How, why, and for whom maps accomplish their ends are pressing concerns in contemporary scholarship. Although many people today routinely encounter maps on computers and GPS devices, let alone on paper, maps were not always so ubiquitous, so handy, or so easy to read.

*Magnificent Maps* was produced to accompany and illustrate an exhibition of the same name, at the British Library in London, between 30 April and 19 September 2010, and in association with a television series. The book focuses on large display maps—chiefly but not only wall maps—produced as ceramic tiles, tapestries, or painted murals, as well as more conventional paper formats, be-

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tween c. 1450 and 1850. The purpose of display maps had much less to do with geographical accuracy than with making an impression: For many people, the display map's visual impact was a sign of political authority and worldly power, and the space in which it appeared mattered more than its topographical exactness.

Most of these maps were created in Europe's centers of cartographic calculation and intellectual activity during this period—Venice, Rome, Florence, Amsterdam, Paris, and London—but the many carefully produced illustrations (more than 150, nearly all of them in color) and the informative text range beyond Europe to discuss numerous American and several Asian examples. The book even embodies the subject in question: The dust jacket folds out to reveal a copy of Diogo Homem's lovely ornamental chart of the Mediterranean and western coasts of Europe, produced in 1570. As a work of scholarship, the book will interest many and hopefully stimulate more research into a form of cartography, and its social, technical, and intellectual context, that has for too long been overlooked.

In a review of the exhibition, Daniels aptly pointed to the importance of the different physical settings, as well as the social spaces, in which these display maps were mounted and viewed—"aptly," since the connections between map type and place of display are a key feature in the volume.<sup>1</sup> Following a short introduction, Chapter 1 offers a historical overview dealing with classical antecedents, the map world of medieval Europe, and the Renaissance. The main part of the book comprises three further chapters, each subdivided according to the display and viewing space of different types of map.

Chapter 2, "Contexts: The Palace," has four main place-based sub-themes—the gallery, the audience chamber, the bed-chamber and other "private" royal reception rooms, and the cabinet. Each one is illustrated with a series of examples. Chapter 3, "Contexts: Beyond the Palace," looks in more detail at the rooms of secretaries of state, a merchant and landowner's house, and a schoolroom. Chapter 4, "Out in the Open: Maps for the Masses," has no such sub-structure, but, and moving beyond the book's general chronological limits, it considers maps in public display about the British general election in 1880; military maps—includ-

1 Stephen Daniels, "Putting Maps In Place," *Journal of Historical Geography*, XXXVI (2010), 473–480.

ing French views of European peace and other European nations' views of continental conflict, from 1877 to 1942—and Soviet cartography between 1922 and 1940. A valuable bibliography of all the sources cited in the volume lists 189 items, many from non-English-language sources.

Three related themes, the first of which is derived from Brewer's work, help to place the book, and its arguments, in interdisciplinary context.<sup>2</sup> The first theme concerns the complex connections between the form, content, and meaning of display maps as objects (their "epistemological space"); the setting of the maps on display (their physical place); and the patrons and audiences for whom the maps were intended and why (their "social space"). The second theme addresses questions of audience and purpose, the didactic and other functions of display maps as a genre, and the act and art of displaying—that is, displaying as a category of analysis with regard to the individual viewer and the map-viewing public as a whole. The third theme focuses on a more explicitly cartographical issue—how such maps ought to be seen today, as works of "art" or of "science," in order ultimately to suggest why such categorization is best avoided and to highlight some of the wider implications. The point of these themes is to situate the book in relation to other works, certainly not to foreclose debate on other interpretive possibilities.

In one way or another, questions of space and place are now more central to historical studies in particular, and to the humanities and the social sciences in general, than was the case a few years ago. As Brewer put it, "A glance out across fields of knowledge quickly reveals that 'space' became the master metaphor of late twentieth-century epistemology."<sup>3</sup> We can now confidently speak of an evident "spatial turn," thereby endorsing the widespread and shared recognition that "where" questions are as crucial as "why," "how," and "when" questions in explanations of the diverse and located character of historical events and change.<sup>4</sup>

Brewer's identification of space's valency and utility is, how-

2 Daniel Brewer, "Lights in Space," *Eighteenth-Century Studies*, XXXVII (2004), 171–186.

3 *Ibid.*, 171.

4 See Barney Warf and Santa Arias, "Introduction: The Reinsertion of Space in the Humanities and Social Sciences," in *idem* (eds.), *The Spatial Turn: Interdisciplinary Perspectives* (London, 2009), 1–10; Withers, "Place and the 'Spatial Turn' in Geography and in History," *Journal for the History of Ideas*, LXX (2009), 637–658.

ever, not just metaphorical. As Lefebvre stridently reminded us, space is not a neutral and simply physical “container” but something socially produced.<sup>5</sup> Space helps to constitute social relationships and meanings as, in turn, it is lent meaning by them. Differences in space—the different meanings that different places make—thus have material consequences concerning how we read and interpret things. As Secord cautioned, although meaning is locally cast, it can and does change through space as well as through time; the importance of the idea of “knowledge in transit” lies in recognizing both local specificity of meaning and the nature of the material forms (such as the map) in which meaning can travel between one place and another.<sup>6</sup>

Although the authors of *Magnificent Maps* do not explicitly engage with such matters, these arguments about the power of space and place are useful in understanding their evidence about the authority, varying form, and purpose of display maps, and the social spaces in which the different maps were held. Map type and room type and, thus, display for particular viewers, were directly associated: “Certain sorts of maps were displayed in galleries that connected different parts of private apartments or linked private spaces (such as bedrooms) and semi-private spaces (such as chapels or private audience chambers). Other types of map were to be seen in what were in effect audience chambers. . . . Lastly, there were ‘cabinets’, which could also be libraries or ‘wardrobes’ or studies, but which represented the most private parts of the official apartments. It was in these spaces that the ruler kept his most prized and prestigious possessions, and to which only his or her most intimate and trusted servants or friends were permitted” (20). World maps, for example, were most commonly displayed in or near audience chambers. In the cabinet, maps had both strategic and symbolic value: “Prior to about 1780 maps were valued for the encyclopaedic information they contained. They were not seen simply as geographic aids” (83).

This emphasis upon the spaces of display provides interesting connections with Schulten’s attention to displays of maps in shop windows as signs of the American public’s engagement with geography and of American identity during the later 1930s. It also reso-

5 Henri Lefebvre (trans. Donald Nicholson-Smith), *The Production of Space* (New York, 1991).

6 James Secord, “Knowledge in Transit,” *Isis*, XCV (2004), 654–672.

nates with Brückner's discussion of how maps functioned in the American home and colonial military office in forging the new republic after the American war of independence.<sup>7</sup> These examples reiterate, for different periods, the well-established role of maps as documents representing national identity and foreign territory, whether seen as a military danger or as a commercial opportunity. They also highlight the nature of audiences and the different ways in which they interacted with maps, not just as consulted in private contemplative study or in strategic discussions, but as spectacles to be pointed at, walked around, and viewed in groups. Not always "read" horizontally, nor even always on paper, display maps as cultural artifacts could be viewed vertically as luxurious objects, statements of religious authority, mercantile ostentation, or kingly hubris.

The form of many display maps—tapestries and wall paintings, for example—and their large size—several illustration captions in *Magnificent Maps* use a stylized "human scale" rather than a graduated scale bar to indicate map size in real life—certainly collaborated to make an impression. Yet, as the authors warn, the materiality of the maps should not detract from their metaphorical power to symbolize space, possession, royal patronage, and the connections between systems of knowledge. The prevalence of the *carte du tendre*, map of tenderness, in late seventeenth-century France shows that they could even allegorize sexual relationships.<sup>8</sup>

That these material and metaphorical characteristics of maps in the past differ from those of today (though all maps continue to have metaphorical purchase, none being a realist mimesis) raises questions not just about how historians are to "read" them as documents or artifacts now but also how their diverse contemporary audiences "read" them. Paper maps in private political spaces, such as a secretary of state's office, would have been read, folded, and put away, only to be consulted again and again. But is "reading"

7 Susan Schulten, *The Geographical Imagination in America, 1880–1950* (Chicago, 2001); Martin Brückner, *The Geographic Revolution in Early America: Maps, Literacy and National Identity* (Chapel Hill, 2006).

8 Jeffrey Peters, *Mapping Discord: Allegorical Cartography in Early Modern French Writing* (Newark, 2004). For a more distinctly utilitarian interpretation of cartography and state governance in France, see Joseph Konvitz, *Cartography in France, 1660–1848: Science, Engineering and Statecraft* (Chicago, 1987). On French cartography more generally in this period, see also Christine Petto, *When France was King of Cartography: The Patronage and Production of Maps in Early Modern France* (Lanham, Md., 2007).

the correct analytical term for maps that were wall-mounted or hung vertically, to be gazed at in bedchambers or in corridors? Ought we to refer to the map-“viewing” public, and is “public” apposite, since, by their very nature, display maps were encountered and scrutinized in particular places by particular people? Was the language of maps understood by everyone who looked at them, and, to address related questions about the very notion of display, what exactly and who exactly was on display in these map spaces? In that regard, *Magnificent Maps* is also a visual declaration of the authority of the map owner, more than it is of the map producer or even of a map itself in any simple terms. After all, paintings in certain galleries, like other works of art shown to the public, were systematically displayed in certain ways to imply a hierarchy of artistic excellence. Moreover, going to view these works was also to put one’s self on view—to be displayed as well as to see a display.<sup>9</sup>

It is, in short, difficult to know who exactly constituted the viewing audience of display maps and what exactly was their reaction, let alone what categories historians are to employ in their interpretations. Pedley identified networks of cartographic exchange between map-minded communities in late eighteenth-century Britain and France.<sup>10</sup> Her emphasis upon the cultures and spaces of cartographic commerce—in map shops, in discussions between members of learned academies even during times of war, or in the stalls of itinerant map salesmen—discloses a more patently public face to the world of maps than the private spaces discussed herein. But the commercial and scientific imperatives associated with maps’ accuracy during the Enlightenment, a totemic “up-to-datedness” symbolic of modernity (both the maps’ and their owners’), were not the same as those that compelled selected courtiers to gaze in wonder, pious clerics to see God’s dominions delineated, or visiting diplomats to discern the strategic value of seeing another state’s topography revealed. Furthermore, neither *Magnificent Maps* nor other works have much to say about the pedagogic uses of cartography in the schoolroom—despite it being

9 See, for example, David H. Solkin, *Art on the Line: The Royal Academy Exhibitions at Somerset House, 1780–1836* (New Haven, 2001); Rosie Dias, “‘A World of Pictures’: Pall Mall and the Topography of Display,” in Miles Ogborn and Withers (eds.), *Georgian Geographies: Essays on Space, Place and Landscape in the Eighteenth Century* (Manchester, 2004), 92–113.

10 Mary Pedley, *The Commerce of Cartography: Making and Marketing Maps in Eighteenth-Century France and England* (Chicago, 2005).

“probably the most familiar, and generally the least magnificent, setting for large wall maps” (146). But, as others have shown, maps in books and atlases and as jigsaws (“dissected maps” as they were known in the eighteenth century) and globes were widespread in teaching geography and other discourses useful to citizenship.<sup>11</sup>

These comments are not to highlight deficiencies in *Magnificent Maps*. The attention to display maps, as opposed to single-sheet paper maps or to maps in atlases or in other printed works, is welcome and timely in highlighting both the diverse materiality of maps as objects and the variations in maps’ meaning. However, we ought not unthinkingly to assume that we have the appropriate analytical categories to deal with the reception and interpretation of display maps (or even of printed maps) as they were deployed in different social contexts and in particular places, though work in art history and the history of print that deals with the issue of reception offers some parallels.

As is the case in book history, map history has problems dealing with what we might call the arts and acts of reception. Reading has been shown to be a multifaceted social, historical, and geographically variable phenomenon.<sup>12</sup> For some, the interpretive process of silent reading was simultaneously an inscriptive act of writing.<sup>13</sup> Likewise, reviewing took place not only in print but also in personal diaries, private conversations, and public denunciations from the pulpit and the lectern. But for maps, the material traces of readership and review may be evident, if at all, more in the drafts of revised editions than in the inscribed comments of users and viewers. Did these different map types—display maps, in particular—have defined interpretive communities as Fish has outlined for texts?<sup>14</sup> The fact that they were associated with particular social sites, discrete sites at that, might lead to such a presump-

11 Jill Shefrin, *Neatly Dissected for the Instruction of Young Ladies and Gentlemen in the Knowledge of Geography: John Spilsbury and Early Dissected Puzzles* (Los Angeles, 1999); Mary Hilton and Shefrin (eds.), *Educating the Child in Enlightenment Britain: Beliefs, Cultures, Practices* (Farnham, 2009); Paul Elliot, *Enlightenment, Modernity and Science: Geographies of Scientific Culture and Improvement in Georgian England* (London, 2010); Schulten, *Geographical Imagination*; Brückner, *Geographic Revolution*.

12 In a wide literature, see, for example, Roger Chartier, *The Order of Books: Readers, Authors, and Libraries in Europe between the Fourteenth and Eighteenth Centuries* (Stanford, 1994); *idem*, “The Order of Things Revisited,” *Modern Intellectual History*, IV (2007), 509–519; Guglielmo Cavallo and Chartier (eds.), *A History of Reading in the West* (Amherst, 1999).

13 Lorraine Daston, “Taking Note(s),” *Isis*, XCV (2004), 443–448.

14 Stanley Fish, *Is There a Text in This Class? The Authority of Interpretive Communities* (Cambridge, Mass., 1980).

tion. But it is notoriously difficult to capture patterns of usage and the agencies of interpretation.

One of the strengths of *Magnificent Maps* is its role in helping to dismiss the outdated categorization of maps and mapmaking as either science or art, or, more properly, its role in challenging the notion that the history of cartography represents the progressive and irresistible triumph of science and reason over the errant depictions of the past and the symbolic embellishments of art. However much modern map historians are now aware of maps as at once artistic, socially produced, and contextually specific, and—to take Jacob’s *Sovereign Map* as one historiographical guide—aware of map history as theoretically and methodologically capable of enrichment from numerous perspectives, such has not always been the case.<sup>15</sup> As Barber and Harper observe, “Aesthetics, connoisseurship and art on the one hand and science, mathematical measurement and maps on the other were long considered entirely distinct and separate. Until a few decades ago, map experts intentionally ignored—or were oblivious to—the broader cultural and political context of all maps. The only standards by which they were prepared to judge a map were its practical use, the quality of its geographical information, and the mathematical precision of the underlying survey. The only additional point of interest tended to be the map’s publishing history” (10).

Maps are intrinsically deceitful devices. Because they cannot accurately portray the object of their attentions, they select, symbolize, reduce, or omit. But they do not do so autonomously by their own free will. In other words, map history has to go beyond the image into matters of production (therein lies the conjunction of a map maker’s technical skill and ideology) but crucially also into matters of reception and audience, wherein rest questions about a map’s use, understanding, and social purpose.

When map history was simpler, science and geometry replaced uncertainty; words, or the equivalent in cartography—line symbols and the language of statistical graphics—were held to correspond to the world. As maps shed art, so they accrued accuracy. But as *Magnificent Maps* makes clear, this historiographical strategy was in error even when it flourished; as the examples of the different maps show, contemporaries had different views about the

15 Christian Jacob (ed. Edward H. Dahl; trans. Tom Conley), *The Sovereign Map: Theoretical Approaches in Cartography Through History* (Chicago, 2006).

power and purpose of maps. Maps certainly have a compelling logic, and an enduring public acceptance, as accurate depictions of space and place. Enlightenment reason especially was suffused with *l'esprit géométrique* and with a faith in the map's rhetoric of persuasive and pervasive certainty in depicting property boundaries, the extent of agricultural holdings, national borders, and the inferential geographies beneath the earth's surface in mineralogical form. But even though then and later, certain maps shunned ornament for good reason, had practical use and exchange value (economically or educationally), or primarily delineated topography, others never made it beyond the wall or out of the cabinet or had only a metaphorical function and a limited audience.

Toward the end of their introduction, Barber and Harper note how "Scholarship has not, until recently, served the great wall map well" (10). It has now. *Magnificent Maps* is a stimulating account of a particular genre and a discussion of differences within that genre. The book teaches almost nothing about the technical issues to be mastered in making a wall-mounted ceramic or tapestry map. Nor does it have much to say about the workings of the printing press, even for such spectacular productions as the world's largest atlas, the *Klencke Atlas* of c.1658, measuring 176 by 231 cm (when open), that a consortium of Dutch merchants presented to Charles II to mark his restoration in May 1660 (92, shown closed, and 93, show open to display the Netherlands). It is significant, however, not just in recovering or in reinstating the genre of the display map—important as that contribution is—but also in further enriching our understanding about maps then and now. Its importance rests in the questions that it raises for map historians, particularly regarding the materiality and purpose of the genre relative to the more usual print-produced in-text or single-sheet paper maps and regarding their currency and power. The book also signals to historians in general the need to be mindful of the complex relationships between art, site, and audience for maps as artistic and scientific achievements.

