The History of Cartography in a Nutshell

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Abstract

This is a very short history of cartography. Notes and links to images are included at the end.

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Editor’s Note:

About five years ago Professor Valerio was asked to prepare a short article on the history of cartography for a multimedia presentation by the Istituto e Museo di Storia della Scienza of Florence. He was astounded to learn that his article could only be thirteen lines long, but he nonetheless complied. The following is a translation of that article.

Most of us are familiar with much longer accounts of this subject, such as the multi-volume History of Cartography being published by the University of Chicago Press, or the single volume edited by James R. Akerman and Robert W. Karrow, Jr., Maps: Finding Our Place in the World (Chicago: University of
But, as the Reader’s Digest has taught us, there are few limits to condensation. Prof. Valerio’s exercise in extreme condensation is interesting in itself, and it might be useful as a model for such purposes as museum exhibitions and Web sites introducing the history of cartography. Numbers in the article correspond to citations of maps illustrating his text. Where possible, Web links to these maps have been included.

The History of Cartography

Mapping (1) is a very ancient way to bring order to one’s spatial surroundings by using graphic techniques. Humans modify the parameters of spatial representations to meet their changing needs (2). Thus originated city plans (3 – 4), route maps, regional (chorographic) maps (5), and world maps (6)—depending on the scale of reduction. Nautical charts (7) came into being with the development of maritime traffic (8-10) in the Mediterranean basin (11). An evolutionary paradigm, which only considers the development of geographic accuracy and precision in mapping, is not applicable to the history of cartography (12). Maps are not always concerned with the depiction of material reality. In the case of religious cartography (13), medieval “Mappaemundi” (14) reflect the anxieties and expectations of Western societies. Modern route maps and the distance maps of antiquity (15-16) serve the same purpose, and their syntax is not substantially different. With the formation of modern states, cartography became an instrument for war and for controlling territory (17). This initiated (18) the mathematical construction of maps (19) and their geometric formalization (20). Along with the standardization of conventional signs and the development of new methods of projection, these developments matured in the eighteenth-century Age of Enlightenment (21-22).

Notes and Illustrations:


2. Plan of Nippur. Probably one of the most ancient urban images at a reduced scale. Dates from the mid-second millennium B.C.) Hilprecht Collection, Friedrich Schiller Universität, Jena. History of Cartography, vol. I, fig. 6.7. (Online at: http://z.about.com/d/archaeology/1/7/B/h/beijing_45pr.jpg)

3. Cadastral map of Orange (France). The marble map of Orange, dating from the first century A.D., not only showed land ownership, but also major physical and cultural features, including rivers, roads, and centuration). Musée Municipale d’Orange. History of Cartography, vol. I, fig. 31.16. (Online at: http://archaeology-images.com/photo-galleries/France/Orange-museum/image1.html)

4. Marble Plan of Rome. The most important urban plan of antiquity, constructed of marble over an area of 13 x 18 meters, brought to completion around 208 A.D. (Now in Musei Comunali, Rome.) E. Rodriguez


12. Borgiano planisphere. A circular word map engraved on copper with a diameter of 63 cm. from the first half of the fifteenth century. Biblioteca Apostolica Vaticana, Borgia XVI. R. Almagià, *Monumenta Cartographica Vaticana*, vol. I 1944, tav. XI. There are also several color reproductions.

13. World map of Fra Mauro. This world map represents the culmination of medieval cartography, in which mythical and fantastic elements are combined with the more modern representation of the coasts of Europe and Northern Africa found in portolan charts. It was made at the request of the Signoria of Venice in the second half of the fifteenth century. Biblioteca Marciana, Venezia. *Colombo e l'apertura degli spazi*, vol. I,
p. 174-175. Also in: *History of Cartography*, vol. I, plate 18. (Online, but the map upside down, at: http://www.bldt.net/Om/IMG/jpg/FraMauroMap.jpg)


17. Aragonese map. The Aragonese Kingdom of Naples was the first modern state to create large-scale maps of its own territory, both for political and administrative as well as military purposes. Archivio di Stato di Napoli, Pianta e disegni, cart. XXXII, 2. Partially reproduced in V. Valerio, *Società Uomini e Istituzioni cartografiche nel Mezzogiorno d’Italia*, Istituto Geografico Militare, Firenze 1993, p. 40 (now also in *History of Cartography*, vol III, p. 949).


19. Map of the measurement of a meridian arc at Quito. With the measurement of two arcs of the meridian—one near the North Pole and the other near the Equator—French scientists attempted to provide a definitive answer concerning the shape of the earth. The mission at the equator was conducted by C.M. de La Condamine between 1736 and 1741.) L. A. Brown, *The Story of Maps*, Dover, New York, 1979, p. 263.


22. French table of conventional signs. In 1803 a commission was drawn together to develop uniform signs and conventions for topographic maps. The result was the first standardization of all cartographic processes from conception to engraving. Plate 4 of *Memorial Topographique et Militaire* n. 5, Parigi 1803. (Online at: [http://www.sunysb.edu/libmap/coordinates/seriesb/no10/signes.jpg](http://www.sunysb.edu/libmap/coordinates/seriesb/no10/signes.jpg))