

## ABYSMAL: A CRITIQUE OF CARTOGRAPHIC REASON

By Gunnar Olsson.

Chicago, IL: University of Chicago Press, 2007. 584 pages, maps, illustrations, diagrams, notes, bibliography, indexes. \$40.00, hardcover.

ISBN: 978-0226629308

Review by: Russell S. Kirby, University of South Florida

It is possible that Gunnar Olsson's Abysmal: A Critique of Cartographic Reason is one of the most important contributions to the field of modern philosophy in recent years. If this is so, let us hope that the "Abysmal for Dummies" version or the Cliff Notes thumbnail summary appears soon, as most intellectuals who are merely "gifted" will never successfully read and comprehend this book from cover to cover. This unfortunate conclusion pains this reviewer greatly, as it is clear that Olsson provides significant insights into the human condition, into the ability of the human mind to think spatially and comprehend one's surroundings within their geographical context, and into how this ability shapes human morality and aesthetics.

Olsson's narrative focuses on the "abyss" between what goes on within the human mind and what goes on in the world. While his context is geographic, this subject will interest all students of philosophy. Olsson argues that all human reasoning is geographic in some sense, and hence, all reason is also cartographic since cartography can be thought of as the language of geography.

The organization of Abysmal is similar to Olsson's earlier writings, including Birds in Egg/Eggs in Bird (1980) and Lines of Power/Limits of Language (1991). The major section headings are as follows: Confession, Prelude, Mappings, Instruments, Imaginations, Collation, Atlas, Requiem, and Memorials. That the book represents prodigious reading and research on Olsson's part goes without saying; the notes section takes up 62 pages in an even smaller font than the body of the text, which is small enough in its own right. This volume links directly to modern philosophy, with direct reference to Kant, Wittgenstein, Whitehead, and other icons of this field of inquiry. However, while there are references to some major figures in the history of cartography, the bibliography contains no citations by key twentiethcentury philosophers of geography (for example, Hartshorne, Sack, and Tuan to name a few).

Abysmal contains many insights and quotable passages, but casual readers will likely be unable to distill the text

to its essence. Those who make the effort will find the journey worthwhile, but most of us will prefer to leave that task to others.

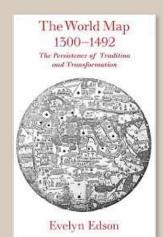
## THE WORLD MAP 1300-1492: THE PERSISTENCE OF TRADITION AND TRANSFORMATION

By Evelyn Edson.

Baltimore. Johns Hopkins University Press, 2007. 312 pp., 35 halftones, 3 line drawings; \$50.00, hardcover.

ISBN 978-0-8018-8589-1

Review by: Jörn Seemann, Departamento de Geociências/Universidade Regional do Cariri (Brazil), Department of Geography & Anthropology/Louisiana State University



The emergence of new and refreshing theoretical and methodological perspectives in cartography has helped us to see historical maps in a different light; that is, as socio-cultural constructions that must be understood within the context of the societies in which they were produced. Bringing to mind the late J.B. Harley, the challenge for the researcher and "cartophiliac" these days is how to read between the lines of the maps to reveal different meanings, hidden agendas, silences, secrecies, and contrasting worldviews.

The most recent book by the historian Evelyn Edson (a specialist on cartography and the Middle Ages) deals with maps and mappings just prior to 1492, and is an example of this more relativistic and context-driven approach to the history of cartography. Over its more than 300 pages, The World Map, 1300-1492 steps into the "contact zones" of three different mapping traditions during this period: the Portolan-style sea-charts of the late medieval seafarers; the world map of the High Middle Ages (with its historical and philosophical underpinnings); and the re-emergence of Ptolemy's geography based on projections and mathematical calculations. Edson's aim is to show the complex relations that existed between these three different worldviews before 1492 when Christopher Columbus set sail for the Americas. Her main argument is that Columbus was not a cartographic path-breaker and that the reshaping of the world was not triggered by the "discovery" of the "New World," but that it instead turned on a process of changing geographical conceptions, mapmaking and usage that had been affecting cartography from a point

far earlier in time. Edson uses more than 30 maps to point out the degree to which these distinct traditions blend and interchange, or exclude themselves from other cartographic narratives. These different worldviews were manifested in the maps and show a dynamic power-field between tradition and transformation in mapmaking.

In her introductory section, the author discusses the example of a nautical atlas created in 1436 by the Venetian merchant Andrea Bianco. The atlas includes elements from the three distinct traditions that form the pillars of Edson's analysis: Portolan-type navigational routes in the Mediterranean and Black Seas and the Atlantic and North Sea coast; a Ptolemy-style map of the known world to pinpoint locations and landmarks mathematically; and a medieval mappamundi with the East at the top and decorated with the pictures of Paradise, dragons and dog-headed men. The subsequent eight chapters of *The World Map* present a kind of jigsaw puzzle of different mapmakers and mapping traditions in different places. Piece by piece, Edson assembles a complete image of the mapping scenario of the fourteenth and fifteenth centuries and indicates how new "discoveries" literally started to break the frame of the traditional map, and how new details brought by missionaries, merchants, and seafarers—and obtained through the use of new instruments such as the astrolabe or the compass—were incorporated in the maps.

Chapters one, two, and five discuss the "purest" forms of these distinct cartographic narratives. First, Edson uses the illustrative example of the thirteenth century Hereford Cathedral map, a late medieval mappamundi, in order to indicate the fusion of "history, geography, botany, zoology, ethnology, and theology into one harmonious and dazzling whole" (p. 31). The Pisa chart (chapter two), considered the oldest known marine chart (about 1275–1300), is a representative of the second tradition: a map with the North at the top, many place names, a scale, color-coding of different features and highly elaborated wind-roses whose innumerate rhumb lines radiate from their centers and almost destroy the aesthetics of the map. Chapter five relates the recovery of Ptolemy's geography in the late fourteenth century and the production of maps with projections and grids of latitudes and longitudes that provided a systematic vision of the world based on the abstract principles of Euclidean geometry.

In contrast to these "pure" narratives, the other chapters of the book are dedicated to the several "mixed" forms and counter-movements. Chapter three reports on the blending of the medieval world map and sea chart and the merging of Catholic universal history and geographically precise cartography. Besides several samples from the Catalan Atlas that was produced in Majorca in the 1370s (and representing the worldview of a Jewish Balearic cartographer; probably Abraham Cresques), Edson also presents the example of Marino

Sanudo's world map from 1321; the Sanudo map shows a concern with the dwindling territorial extent of Roman Catholic Christianity, and urges Papal approval for Crusade-style military action. While chapter four deals with the type of geographical knowledge (hovering between fact and fiction) that was created by travelers, missionaries, and merchants (such as Ibn Battuta, William Rubruck, and Marco Polo), or charlatans and plagiarists (such as John Mandeville), chapter seven presents an account of a "backwater school of geography" (p. 188) that demonstrated that "maps did not have to be up-to-date in order to be valuable to the mapusing public" (p. 169). Conservative world maps such as the one included in Ranulf Higden's Polychronicon demonstrated the survival of medieval myths in cartography. Among other features, the map locates Noah's Ark in Armenia, shows Paradise (with Adam and Eve) as a real place, and has the Red Sea colored in red.

In chapter six, the author analyzes the world map created around 1450 by the Italian monk Fra Mauro, "nearly six feet in diameter, painted on parchment glued to wood panels" (p. 141). This map represents an early attempt to merge the three traditions in one map: The south is at the top, while at the center of the map is the holy city of Jerusalem. The contents, while supposedly based on "trustworthy" accounts and "reliable reports" from merchants and seafarers, also mention classical and medieval authors such as Pliny and Macrobius as references.

These earlier chapters of the book lead to a final section that deals with the transformation of the world map at the end of the fifteenth century as exemplified by the socalled "Columbus Map," by the world map of Henricus Martellus Germanus, and by Martin Behaim's globe. The confirmation of the existence of a "new" continent in 1492 resulted in a "breaking of the frame" of the world map in order to include "the reports that poured in from all sides" (p. 226). Edson summarizes her tour through the mapped world between 1300 and 1492 by stating that "before America was discovered, there was a place to put it on the map." (p. 227) The tensions between the mathematical, the divine, and the practical aspects of maps resulted in a complex and dynamic landscape of mapmaking that was ready to deal with a new world.

*The World Map: 1300–1492* is a fascinating *tour-de-force* of the mapping activities at the brink of 1492, frequently seen as a "magical date" for cartography. Evelyn Edson not only draws a picture of the coexistence of the three different mapping traditions during that period, but also reveals their different forms of interaction and resistance. There were, however, rarely clear-cut edges between the three forms, which should not be seen as opposing, but as complementary, worldviews. Edson is able to point out that mapmaking during this period was anything but static; new spaces, imaginary or real, were mapped quickly, and consequently the map was conceived as

less a finished product and more a process in constant becoming. The "growth" of the known world and the reshaping of the world map began far before Columbian times, when changes in the form, content, orientation, labels, and legends expressed the struggle between cosmology and reality, and meaning and measurement, and resulted in the "breaking" of the map frame.

The author teaches us a detailed lesson of the literary sources that contributed to the creation of the three different mapping approaches. Her references include short biographical sketches and mention authors such as Pliny, Ptolemy, Pomponius Mela, Macrobius, Solinus, Martianus Capella, Marco Polo, and Ibn Battuta. All this erudition showcases the thorough training in medieval history that Edson has already proven in two previous books, Mapping Time and Space: How Medieval Mapmakers Viewed Their World (published in 1997 by the British Library in London) and Medieval Views of the Cosmos (co-authored with Emilie Savage-Smith and published by the Bodleian Library at Oxford in 2004). Edson goes beyond the mere reference to the sources and is able to point out cultural, political, and economic contexts of mapmaking during the period. Religious conventions such as the Councils of Constance and Florence, for example, were not only places to discuss Catholic doctrine, but were also real "markets" for the interchange of manuscripts and information and the communication and diffusion of cartographic ideas.

The World Map is not, however, without fault. Despite limits of time, pages and funding, one rather wishes the author could have included colored maps and added more cartographic examples in order to show the relations between the three traditions. As well, the sequence of the chapters does not necessarily follow a convincing logic and only loosely connects the different parts of the book. In some passages Edson's style appears too "technical," while some of the detailed academic discussions (albeit carefully referenced in more than 600 endnotes) require insider knowledge.

A striking negative point of the book is the editing of the maps. The small size and inferior quality of some of the map reproductions makes their appreciation almost impossible. The "solution" adopted for the scale issue was to spread almost half of the 38 figures across two pages. As a result of this editorial infelicity, these maps are literally cut in the middle. The beautiful calendar wheel from the Catalan Atlas (1375), depicted on pages 76-77, is the most egregious example of these "cartographic atrocities" that simply spoil part of the reading. Some of the maps could easily have been rotated by 90° for a better outcome.

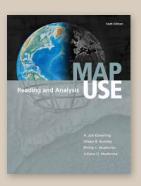
After the description and analysis of the book, there are still some remaining questions that refer to the contents and the significance of the book for us. Why should the readers of Cartographic Perspectives care about maps that were created more than half a millennium

ago? Why should geographers, cartographers, and other mapmakers know about Andrea Bianco, Fra Mauro, Abraham Cresques or Ranulf Higden? There is no doubt that the Ptolemaic tradition blended with the rationalist principles of Enlightenment geometry is one of the pillars of present-day cartography. This "cold" cartography of objective space has extirpated much of the humanistic tradition and agency. There is little space given today for human values and subjective worldviews as shown in the tradition of the Portolan charts and the medieval mappaemundi. While the modern map is basically a search for the "where" and the "plain representation of physical space," medieval world maps had tried to answer the "what," "when," and even "why" and served as a "veritable encyclopedia of human knowledge and belief about the world." (p. 227) Portolan-style sea-charts, in contrast to both these traditions, were based mainly on the mariners' notions of time, space and distance, on dead-reckoning and direct observation. Could/should these two traditions be reintroduced to cartography? Should they be neglected? Could there be a cartography that does not separate cosmology and reality? We easily mock medieval T-O maps that put Jerusalem in the center of the world, but is the Prime Meridian not an equally conventional reference?

There is a recent recovery of these two mapping approaches in arts and humanities (see the recent special issue of Cartographic Perspectives [53] on mappings and the arts). However, this more subversive attitude towards cartography does not mean that we have to abandon the principles of scientific cartography. Making objective maps does not mean that we could not have a different worldview—something which could be refreshing in a cartographic world of technologies and precision that is driven by market "laws." In this sense, Evelyn Edson's book could be a complementary reading for further reflections, and an invitation to mull over our own cartographic practice.

## MAP USE: READING AND ANALYSIS

By A. Jon Kimerling, Aileen R. Buckley, Philip C. Muehrcke and Juliana O. Muehrcke. 6th edition, Redlands, California, Esri Press Academic, 2009. 528 pages, approx. 500 four-color maps, photos, tables and charts. \$99.95, hardcover.



ISBN: 978-1-58948-190-9.

Reviewed by: Julia Siemer, University of Regina

Map Use: Reading and Analysis is the sixth edition of the well-known and well-received book Map Use: Reading, Analysis, *Interpretation* by Muehrcke