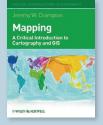
MAPPING: A CRITICAL INTRODUCTION TO CARTOGRAPHY AND GIS



By Jeremy W. Crampton.

Chicester: Wiley-Blackwell, 2010; x, 217 pp; maps, tables, illustrations, references.

\$39.95 softcover.

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

Most students of cartographic science develop an understanding of mapping methods within a framework devoid of discussions of ideology and values: of the role they play in shaping how maps are made and what they mean to those who read them. As an undergraduate and graduate student in the 1970s, my understanding of social geography was greatly influenced by the philosophy of science as embodied largely in the logical positivist framework, together with an interest in the study of the origins of concepts and theories to which the spatial perspective could be applied. As I studied cartographic methods, it all seemed very straightforward-the cartographer sought to provide a legible map that displayed the results of a geographic analysis, in a manner that either conveyed those findings directly, or raised additional questions based on the spatial patterns revealed on the map. As the years have passed, I've come to realize that, as with so many other topics we study, there are stories within stories. Like the layers of an onion, they are revealed only as one peels each one off and finds another beneath.

In this text of relatively modest length (184 pages not including end matter), Jeremy Crampton seeks to unpeel the layers of the figurative onion of cartography and geographic information systems (GIS) in order to provide both a broad and in-depth introduction to these fields. While others have covered this material before, what sets Crampton's effort apart is his focus on critical cartography and GIS. When approached from this perspective, the discourse changes from one focusing on the mechanical aspects of map production and visual perception, to one in which the purpose of the map, the cultural context of the mapmaker, and the socio-political structures within which the cartographer is employed, bear significantly on the making and meaning of the map.

Mapping consists of thirteen chapters. In the first two, Crampton provides a basis for why this book was

written, what the critical approach entails and why that approach is needed. To get the most out of this book, readers must make a conceptual frame-shift from GIS and cartography as mapping methods to a consideration of the historical dimensions and context of the mapping tradition. The second chapter, "What is Critique?," is especially useful in describing the analytical approach the author takes for the remainder of the book.

Mapping next examines, in no particular order, the role of computing technologies and the World Wide Web in changing the ways that maps are conceptualized and generated by mapmakers and map users alike. Other chapters exploring related topics include those on "Geosurveillance and Spying with Maps" and "Cyberspace and Virtual Worlds." While some of the topics Crampton discusses are already out of date, the general tone of the discourse is on target.

The chapter "How Mapping Became Scientific" explores the evolution of cartography as a scientific discipline, which is largely a mid-twentieth century phenomenon. Crampton emphasizes the role of Arthur Robinson in creating a scientific basis for cartography and in espousing a set of design principles as described and elaborated in the many editions of his standard textbook, Elements of Cartography (this reviewer was introduced to the subject with the 3rd edition¹). Crampton argues that because Robinson's approach neglected to consider the inter-relationships among maps, power, and knowledge, in providing a scientific foundation for the field of cartography it also generated an "ontologic crisis" that has taken several decades to resolve. Succeeding chapters explore the role of maps in politics and political economics, the Peters projection and its political history, and recent developments in the field of GIS.

Two other chapters deserve special mention. Crampton devotes one chapter to a discussion of the relationship between mapping and the socio-political construction of the concept of race through an exploration of the origins of ethnographic and racial mapping, with several examples from 19th and early 20th Century maps. This chapter, however, would benefit from a broader reading in the anthropological, sociological and public health literature on race as a cultural rather than a biological construct, and from a discussion of how race is measured in public data sources. Crampton also included a chapter on "The Poetics of Space: Art, Beauty, and Imagination," in which he explores the role of art and imagery in mapping.

In a book of this nature, intended to be thoughtprovoking rather than academically exhaustive, the author could not reference every major figure and influential work, but it is interesting to note that the bibliography references none of the writings of either Edward Tufte or Jacques Bertin. As well, at times Crampton writes in an overly familiar style that borders, in several places, on the autobiographical. Still, although readers active in the fields of cartography, geography and/or GIS from the 1950s to the turn of the century will most definitely react to some of the characterizations of individuals, articles, books and dialogues important to the development of the field during this period, on balance, at least from this reviewer's perspective, Crampton's discourse is generally on the mark.

That said, Crampton's text may not be for everyone. A casual reader with no previous training in cartography may find this book tedious and argumentative, but for those with some coursework or formal training in GIS or cartography the discourses may ring true. As a course text, this book would be more suited to an advanced course or graduate seminar. Geography and map libraries should certainly consider adding it to their collections, and for the academic cartographer or geographer, it is a book well worth reading.

Notes

1. Robinson, Arthur H., and Randall D. Sale. 1969. Elements of Cartography. New York: John Wiley & Sons, Inc.

disORIENTATION²



By Counter-Cartographies Collective (3Cs).

Chapel Hill, NC: 3Cs, 2009. 1 folded broadsheet, 2 sides, 1 color. Free.

Review by: Michael Karabinos, Map Librarian, National Geographic Society

The Counter Cartographies Collective's (3Cs) disOrientation² blends art, cartography, and radical politics in much the same vein as does An Atlas of Radical Cartography and the book Experimental Geography. The difference is the ultra-local nature of disOrientation². Centered on the campus of the University of North Carolina–Chapel Hill, this folding map serves both to orient students to the political reality of their school, and at the same time to disorient them by disrupting the comforting mythologies and glossedover contradictions that frame the "traditional" university experience. This guide will help them see not only what transpires inside their university bubble, but will prepare them for recognizing the greater struggles off campus.

disOrientation² educates and informs its readership about such topics as student visas, staff furloughs, tuition hikes, and the influx of private corporation interests on campus. The guide is broken down into sections based on topic, and includes five maps used in conjunction with text to visualize the problems discussed. Because the layout seems to have no obvious starting point or main channel of flow, I have ordered my reading of the individual sections as seemed logical to me.

Crisis...at school?!?

Likely most college freshmen will have heard of the current economic crisis. In its introductory paragraph, disOrientation² sets off to put the crisis into context by showing how it will affect students at UNC. While talk of budget cutting always sounds bad, students may not initially understand what such cuts can actually mean to their lives and studies. By posing questions such as: How much will tuition increase?, Which classes will be canceled?, and Will we be able to graduate?, the 3Cs get to the central cause most students care about—themselves. Once the students see how these issues influence their lives, they may be more willing to look at a wider picture of how such problems and practices affect others. Thus primed, the students are now ready to continue reading the map.

Welcome to the university = Welcome to the real world

The idea, put forward by 3Cs, that four years in college is equal to four years in "the real world" may seem ludicrous to some observers. Rarely in what is called the real world does one create one's own schedule, regularly sleep until noon, have no work on Fridays, live with their friends in the same building, and have meals prepared for them in a dining hall. This is, however, very likely the standard university experience for most American students. So while the 3Cs assertion might appear ridiculous on the surface, it is essentially the basis for the existence of this map. A student may never understand why his or her tuition is raised, or why a professor is not as reachable as the student would like, but disOrientation² explains these phenomena in ways students can grasp.

I have seen something of these phenomena in action myself: my wife is an adjunct professor. She is paid, per class, the same amount that one student pays for that course—one student, that is, out of the 18 students she teaches with facilities capable of supporting only 14. Budgetary restrictions have led to cuts in full-time staff, which in turn creates a university of part-time adjunct faculty, who are paid a below-living wage salary, without benefits, who cannot possibly give the students they teach the attention they deserve. While tuition rates increase, students have ever less one-onone time with a faculty stretched to the limit. Some schools have attempted to adjust for lost funding by increasing enrollment; this practice leads to classroom overcrowding, which further stretches the remaining part-time faculty and thus continues the cycle. 3Cs, in