

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.

## disORIENTATION<sup>2</sup>



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) *disOrientation<sup>2</sup>* 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 *disOrientation<sup>2</sup>*. 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 glossed-over 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.

*disOrientation<sup>2</sup>* 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, *disOrientation<sup>2</sup>* 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 *disOrientation<sup>2</sup>* 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-on-one 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

a clear and unique visual manner, brings these unseen realities of university life to the attention of students who otherwise might have all too easily remained oblivious to this spiral during their brief turn on campus.

### **Navigating borders at UNC/ Precarity on Campus**

UNC is, along with Duke and NC State University, one of the anchors of the North Carolina Research Triangle, an area packed with large technology corporations. As a result, UNC is one of the major providers of student visas in the region. The disOrientation<sup>2</sup> map provides a map of the Triangle area as well as background information on the different types of student visas available and what each type of visa allows an international student to do. Most visas place strict limitations on what the holder can do, including restrictions on research travel and temporary work. A link is made between the immigrant construction workers and laborers who work on campus and the international graduate students who are teaching courses: both face the same problems of unemployed summers, furloughs, healthcare cuts, and layoffs. There are two maps that visualize the text in this section: one is a campus map of UNC with cartoon people representing the usually unseen and overlooked campus workers (janitors, cooks, bus drivers), as well as lecturers and students. The second map uses proportional circles to show the number of international employees (grouped by category of visa) at the three universities and at some of the major employers in the Research Triangle: IBM, Synergy Solutions, Cisco, SAS, and Infomerica.

### **Ranking and Competition**

College rankings are always a controversial issue. There is no one way to determine which colleges are better than others. disOrientation<sup>2</sup>'s Ranking and Competition map shows other major state universities and two private schools (University of Southern California and Duke University) on a 48-state US map styled to look like a basketball court. Each school is represented by a basketball jersey listing its major corporate connections, U.S. News ranking, number of students, and out-of-state tuition. The tuition rates at UNC are the second-lowest on the list—although still astronomical—and UNC's corporate partnerships with Nike and GlaxoSmithKline make sense in the context of athletics and the Research Triangle. The map notes that UNC has a multi-million dollar contract with Nike (and a website search shows all UNC basketball and football jerseys, tee-shirts, sweatshirts, and athletic shorts available for purchase to be Nike products), with most of that money going towards non-tenure teaching—a problematic staffing policy already discussed.

It is interesting that this map was created at UNC, a school with a distinct brand attached to it. The university uses its national exposure from basketball to extend its brand and to attract new students to campus; these same students may then, through their encounter with the

3Cs map, be educated about other sides of the school. The problems highlighted in this section of the map, though perhaps unexpected at a school that obviously has so much money from lucrative contracts and is in the national spotlight each March, exist on most American campuses and not only at UNC.

### **The Goal of Research at UNC-CH**

It might seem obvious that research is where a university makes its money. Universities consistently promote their research institutes and corporate connections—as 3Cs showed above. Campuses are frequently updated with new research parks, science buildings, and laboratories. 3Cs, however, makes the claim that research actually loses money, and that research at UNC is subsidized by the teaching departments such as English and History. But teaching subjects like the humanities is not as marketable as big name science and, despite their fiscal soundness, such departments are continually pushed aside when it comes to marketing and funding.

### **Students: Global Migrants**

The map in this section ties into the earlier discussion of visa issues, although in this case the focus is solely on students and not workers. We see that over one million students from the rest of the world go to universities in Europe and North America, with most coming from China. The industrialized world, it is explained, is participating in a system where education is exported—with a gain of tuition—and students are imported—with the gain being a research and skilled labor force.

The contemporary campus aspect of the guide concludes on an image of cartoon people asking, in response to the fact that “students, faculty, and staff have less and less control over how the university is run: Is this the university we want?” While a fair question, in fairness it should be noted that this reality exists at colleges and universities throughout the country. It is not as though there is another option for the reader at another university.

### **Forecast: New Waves of Autonomy**

This part of the guide puts the contemporary UNC situation in a spatial/temporal context. A world map showing “current struggles and autonomous universities, as well as participants in the series of ‘Edu-Factory’ discussions” attempts to show that problems in higher education exist far beyond Chapel Hill. Somehow, though perhaps unfairly, I cannot help but feel more sympathetic to the students in other parts of the world protesting university censorship and anti-democratic governments than I can to the plight of American students. The map singles out the occupation of buildings at the New School and NYU over the corporatization of their schools, with no updates or explanations of what the students expected from their actions. The over-

corporatization of the American educational system is a problem, and the university infrastructure of this country needs major reworking, but it could be argued that the route taken by 3Cs is more likely to generate results than the actual protests and occupations. As I wrote this review, news of a protest-turned-street-fight between activists and police at UC-Berkeley began to crop up. This development is unlikely to garner much sympathy from the American public towards the protesters' cause—be it tuition hikes or a living wage for university workers. 3Cs uses knowledge, facts, numbers, and images to clearly state problems and goals in a way that young students, recently out of high school, can understand and use as a basis for discussing effective solutions. It also operates in a way that uses words instead of unrest, and which allows 3Cs to have an active voice while still being able to come across persuasively to those who may be put off by marches and protests.

### UNC 1960–2009: A People's History

The “People's History” timeline of UNC political activism puts 3Cs in historical context as part of a long line of on-campus student/worker engagement. The history begins with the first black undergraduates admitted to UNC, and ends on a wishful-thinking 2012 entry of “UNC-CH re-opens as a free university under worker control.” The timeline runs entwined with American social history: civil rights protests led into Vietnam War demonstrations; women's rights and gay rights in the 70s; protests against apartheid in the 80s; and the past 20 years dealing with workers' rights and the Iraq War. Both the Global University Struggles and the People's History Timeline continue as interactive maps on the 3Cs website (<http://www.countercartographies.org/>), where one can also download the first edition of disOrientation.

### Conclusion

Taking the politics out of the maps does not leave you with much in terms of content or new mapping technologies. According to the group, the guide was created using Adobe Illustrator, Inkscape, ArcGIS, the Google API, and Circos, with the final layout produced in Illustrator and the individual maps being designed in Inkscape and Illustrator. The maps in this product exist as a means to political ends. disOrientation<sup>2</sup> could have been all text, or it could have been text with graphs or other images; the maps complement the text and not the other way around. They are a visualization of the political content, but whatever their position, they are effective and worth viewing. disOrientation<sup>2</sup> may interest geography students and push them towards politics, or may push political science students or student activists towards geography and cartography.

## EVERYTHING SINGS: MAPS FOR A NARRATIVE ATLAS



By Denis Wood.

Los Angeles: Siglo Press, 2010. 112 pages. \$28.00, softcover with sewn binding.  
ISBN: 978-0979956249

**Review by:** Tom Koch, University of British Columbia

“Everything sings ... for us.”

Denis Wood makes maps. Who knew?

Long-time, some-time NACIS member Denis Wood is well known as a critic, curator, historian, and theoretician of maps. Wood has often written about maps, from his 1992 *The Power of Maps* through his (and John Fels') *The Natures of Maps* of 2008, but despite co-authoring *Making Maps* with John Krygier, does he actually ... *make* maps? The whisper had always been that Denis Wood only writes about maps while we, the “real” NACIS members, make them. He is like the literary critic whose novelistic efforts are never published, and certainly never seen. So it has been widely suspected that Wood, and by extension a range of academics interested in cartography, is really just a voyeur in the world of *real* mapmakers whose working lives are dedicated to the business of making maps.

The great surprise of Wood's new book, *Everything Sings*, is that he can indeed make maps of real beauty and power, maps redolent with content.

The more than 50 maps in *Everything Sings* build toward a narrative of Boylan Heights, the Raleigh, NC, neighborhood where Wood lived and worked for 23 years. Their genesis, he writes in the introduction, was a design studio course he taught for landscape architecture students at North Carolina State University in Raleigh. “I used mapping as a way of selectively focusing their attention on those aspects of the landscape that, in the instrumentality of their training as future professionals... they were apt to overlook” (p. 14).

This was mapping for professionals in training, albeit not cartographic professionals, who could be expected to use maps in their work. The studies were directed by someone trained in the old days of 1960's handiwork cartography, of mapmaking before the desktop computer and GIS became ubiquitous. The neighborhood scale of the atlas encouraged student fieldwork; the independent collection of data that could be used to craft a map of this or that phenomenon. Not coincidentally, the scale was one the students would, as landscape architects, later engage in their work.