Counter (Mapping) Actions: Mapping as Militant Research

Counter Cartographies Collective[1]

http://countercartographies.org

Craig Dalton[1]

Department of Geography
University of North Carolina at Chapel Hill
craig.dalton@unc.edu

Liz Mason-Deese[1]

Department of Geography
University of North Carolina at Chapel Hill
masondee@email.unc.edu

Abstract

We, the Counter Cartographies Collective (3Cs), propose a specific form of counter-mapping, autonomous cartography, to understand and intervene in the processes at our university, the University of North Carolina at Chapel Hill. As autonomous, militant research, this mapping aims to foster cooperation among researchers and participants to practically intervene in real problems without attempting to marshal state or administrative power. Our experience shows that

---

autonomous cartography helps produce new, alternative practices, knowledges and subjects at our university and others.

Even as we draw on critical cartography and other cases of counter-mapping, autonomous cartography constitutes a distinct form of counter-mapping through our combination of autonomous theory, militant research and mapping. In this paper, we explore constitutive influences on 3Cs and our own militant counter-mapping experiences. We begin with a review of the theoretical basis of autonomous cartography as a form of critical cartography and counter-mapping. Next, we introduce the key concepts and practices of autonomous politics and militant research through the examples of Colectivo Situaciones, Precarias a la Deriva and Hackitectura. In the second half of the paper, we review 3Cs' founding conditions and two of our maps. Finally, we conclude by examining the methods and impacts of our mappings.

Introduction

In 2005, the University of North Carolina at Chapel Hill canceled Labor Day…in part. Administration and staff had the day off. Teaching and research assistants, faculty and students did not. After years of labor organizing at the university, a group of students and faculty began to ask new questions: What spatial, cultural and economic processes produce this public university that cancels Labor Day? How can we organize to create a more equitable university without ultimately serving as a similarly problematic administration ourselves? To address these questions, we turned to some of our existing conceptual tools: practices of self-organized political action and mapping found in our academic work and our experience as activists. With these ideas, we set out to re-map our university.

The Counter Cartographies Collective (3Cs) combines research with critical mapping to produce alternative ways of visualizing and inhabiting the world and our university. This paper advocates for an autonomous cartography, 3Cs' combination of militant research and autonomous politics with critical cartography's counter-mapping genre. 3Cs' autonomous cartography, a form of cartographic militant research, begins from our own situation to create a mapping of and for political change without the aim of becoming a singular, dominating (cartographic) power. It is committed to an autonomous politics that emphasizes the creativity of labor over that of capital, and that works for political change beyond elections or state-centered activism. Autonomist theory recognizes the importance of knowledge in political struggle and in today's global economy. As militant research, it simultaneously produces knowledge and serves as a political intervention. In this context, knowledge production is a political task from the beginning. Mapping has an especially important role: understanding the changing landscape of labor when production is geographically diffused.

Within critical cartography, 3Cs' specific practice of mapping as militant research differentiates autonomous cartography from other forms of counter-mapping. We use autonomous cartography to analyze and intervene in current

social processes at the University of North Carolina at Chapel Hill and, through collaborations with other groups, at other institutions of higher education around the world. Our experiences with autonomous cartography show it to be a promising way to instigate critical organizing and knowledge production. Instead of attempting to influence university administration or informing the general student population, this mapping makes a difference by prompting critical and reflexive self-organizing cognizant of the many forms of labor at the university and the university's role in the larger economy. 3C's autonomous cartography creates new, non-hierarchical relationships within 3Cs and new subjectivities as people interact with our maps and begin to participate in the university in different ways.

We begin the paper with a review of critical cartography, its counter-mapping genre and the basis of autonomous cartography in geographical literature. As a type of counter-mapping, autonomous cartography utilizes critical cartography's points about maps and power, but does so in a new way to promote forms of self-organizing that use autonomous politics and militant research practices. To clarify these ideas, we introduce the concept of autonomy and the autonomous militant research practices of Colectivo Situaciones, Precarias a la Deriva and Hackitectura. The works of these groups are historical preconditions for our own research practices and intended outcomes. In the second half of the paper, we review 3Cs' founding conditions and two of our maps. Finally, we conclude by examining the methods and impacts of our mappings.

Mapping

Autonomous cartography is part of the critical turn in cartography and that literature's critiques of power in mapping and forms of geographic knowledge. Citing Foucault's understanding of power as productive, critical geographers point out that mapping is always a situated, political process with a social context, purpose and effects (Foucault, 1995; Wood and Fels, 1992; Edney, 1993; Harley, 2001; Pickles, 2003; Crampton, 2010).

A second part of critical cartography shows the many legitimate forms that this power-knowledge can take beyond standardized, professionalized cartography. For example, the Critical GIS literature shows how GIS is not just a material technology, but also a set of social practices. These practices can include the agency of users with different kinds of subject positions. Finally, GIS can be used for many different kinds of research including less positivistic, qualitative work (Kwan, 2002: Kwan and Knigge, 2006; Sheppard, 2005; Elwood, 2010).

In light of critical cartography's points, several recent publications investigate fundamental, even ontological reworkings of mapping as a social process (Crampton, 2003; Pickles, 2003; Chrisman, 2005; Kitchin and Dodge, 2007; Leszyzynski, 2009). Pickles proposes a Deleuzian-inspired theoretical framework that is particularly useful for conceptualizing the role of mapping and social change. He argues that a map is an "inscription that does (or does not do) work in the world" (Pickles, 2003, 67). Practicing mapping is an important part of

complex social processes that dually construct both material geographical worlds and visual understandings of them (Chrisman, 2005; Sparke, 2005). Pickles calls on geographers to support and engage in many different kinds of mapping to help create other, alternative spaces and worlds, a logic he describes as "and, and, and" (Pickles, 2003).

Counter-Mapping

Among the many kinds of critical mapping, we focus on one genre, counter-mapping. Harris and Hazen define counter-mapping as "any effort that fundamentally questions the assumptions or biases of cartographic conventions, that challenges predominant power effects of mapping, or that engages in mapping in ways that upset power relations" (Harris and Hazen, 115). Even a cursory glance at the twentieth century reveals a number of examples from the Surrealists to the Situationists to Bill Bunge's geographical expeditions into 1960-70's Detroit to Doug Aberley's low-tech mapping for community organizing (Wood, 2010; Bunge, 1971; Pickles, 2003; Aberley, 1993).

Nancy Peluso introduced the term "counter-mapping" to geography journals to describe mapping practices by indigenous people in Kalimantan, Indonesia as they made maps to contest Indonesian state land-use plans (1995). The concept of counter-mapping not only resonated with indigenous mapping but also the then-emerging GIS and Society/Critical GIS literature (Schuurman, 2000; Sheppard, 2005). Partly coming out of that literature, Public Participatory GIS (PPGIS) initiatives put the power of GIS technologies in the hands of community members, often in connection with urban planning and development. These initiatives highlight how counter-mapping practices can cartographically and politically represent marginalized groups in relation to governments (Craig et al., 2002). Even with these strengths, Elwood finds that people in the marginal groups sometimes use GIS mapping to replicate the mapping practices of states, such as surveillance. In a reflexive move, she points out that an oppositional dynamic of cooptation/resistance is not always an appropriate framework to understand the multiple dimensions and purposes of GIS use by community organizations (Elwood, 2006). Other studies of counter-mapping also encounter weighty problems including conflicting priorities, how to practice community organization, integrating mapping into larger movements and the limitations of Cartesian mapping in representing local geographic knowledges (Hodgson and Schroeder, 2002; Walker and Peters, 2001). Bryan in particular points out the dangers of indigenous counter-mapping that is subsumed into state and colonialist discourses (2009). Any reflexive counter-mapping initiative must be prepared to deal with these issues. 3C's autonomous cartography offers a new approach to counter-mapping that brings critical cartography together with theories and practices of autonomous politics and militant research.

Situating Autonomous Cartography

Autonomous cartography builds on the insights of critical cartography and counter-mapping using practices of militant research and ideas of autonomous politics, two traditions which we explain in the following section. Research shows that some people self-consciously make political counter-maps not only for tactical purposes, but explicitly to create new kinds of maps and geographies (Holmes, 2004; Cobarrubias, 2009). The fact that groups across the political spectrum create these sorts of maps illustrates that counter-mapping itself is not necessarily politically progressive, but that geographical imaginations are important sites of struggle (Wood, 2010). Given these observations and a commitment to autonomous politics, 3Cs uses what Deleuze calls a "new cartography," a practice that creates new (political geographic) possibilities and other (political geographic) realities, rather than *re*presenting already existing geographies (Deleuze, 1988). In practice, 3Cs draws inspiration from the independent, self-consciously political, European counter-mapping described by Holmes, Cobarrubias and Pickles (Holmes, 2004; Cobarrubias, 2009; Cobarrubias and Pickles, 2008). Parallel to the movements they describe, we seek to create change through the power of migrants, students and workers independent of institutional or state powers by using counter-mapping. From another direction, 3Cs' autonomous cartography also draws on the militant research of Colectivo Situaciones and Precarias a la Deriva. 3Cs' respective combination of counter-mapping with these particular forms of militant research render autonomous cartography as new and distinct. Our purpose is not to disallow or discount other forms of mapping or cartography. Instead, we apply the proliferating logic of "and, and, and…" to disseminate multiple additional ways of mapping, helping to open up different possibilities and alternatives (Pickles, 2003; Deleuze and Guattari, 1987).

This theoretical trajectory marks 3Cs' purpose for and approach to autonomous cartography as somewhat different from better documented forms of counter-mapping. PPGIS and indigenous mapping can facilitate democratic geographic decision-making through the state (Craig et al., 2002). While this strategy can work in local planning, mapping can do more and different things. Autonomous cartography excels at creating new geographic knowledges and related critical, militant organizing. Moreover, this political approach to mapping is not an abstract framework applied by outside researchers (Elwood, 2006). 3Cs maps intentionally and explicitly in terms of a struggle. This strategy of social change, the "autonomous" in autonomous cartography, draws on literatures of social struggle and research that are less focused on maps.

Autonomy and Militant Research

In this section, we introduce autonomy through a brief review of the autonomist theory that pertains to 3Cs' research methods and theoretical underpinnings. We discuss the work of three autonomist militant research collectives: Colectivo Situaciones, Precarias a la Deriva and Hackitectura. These

groups are foundational for 3Cs in their understandings of research methodologies, analyses of the contemporary economy, and the meaning of autonomy today.

In current political practice, autonomy refers to social movements that do not seek to gain state power and that act outside of formalized political parties, trade unions, and NGOs. Historically, self-labeled autonomous movements have favored alternative methods of political action, such as squats and land-takeovers, pirate media, *autoriduzione* (the organized refusal to pay for a particular commodity), and other forms of direct action (Lotringer and Marazzi, 2007). In their internal and external organization, they avoid dynamics of representative politics (be it through parliaments or union elections) by using assembly type organization, revocable power and other experiments with direct democracy. These movements emerged out of the self-organization of workers with students, domestic workers, the unemployed and others who were excluded from state and union-oriented modes of organization. Today, many of the most innovative and active movements around the world, such as the Zapatistas (Holloway, 2002), the Anomalous Wave in Italy (Edu-Factory Collective, 2008), urban social movements across Latin America (Zibechi, 2008), and the Occupy movement (Moreno-Caballud and Sitrin, 2011), draw on diverse ideas of autonomy.

As autonomous movements influence 3Cs, we draw on associated theories of Autonomist Marxism. This literature emphasizes the primacy of resistance and the autonomy of the working class. Here the working class is the active agent of history, while capital is reactive, only able to respond to the creativity and innovation of labor. This approach makes a number of influential contributions to autonomous practice today. First, activists use terms such as counterpower to refer to the agency of social movements and the working class. This is creative power, power that opens up new possibilities, while the power of capital captures and contains this power (Colectivo Situaciones, 2001). Second, Autonomist thinkers expand the notion of the working class and its power beyond the factory. Tronti originally theorized the "social factory," recognizing that production occurs throughout the social field and that workers take many forms (Lotringer and Marazzi, 2007).[2] Today, Autonomist thinkers have expanded this idea, building on Marx's concept of real subsumption, to argue that all of life has become productive (Hardt and Negri, 2000). Third, as we discuss in more detail below, research and inquiry play a privileged role in autonomist political practice in order to understand changing class composition, the makeup of the working class, and struggles today.

All three theoretical contributions play a part in 3Cs' work. The notion of the primacy of resistance, the starting point of autonomist theory, guides our insistence on looking to workers and struggles for the production of new geographic knowledges. The concepts of the 'social factory' and the general intellect allow us

---

[2] While we cite specific authors and works it is important to remember that these ideas were collectively developed by the movements we describe.

to understand the multiple economic roles of the university. Theorists of *cognitive capitalism*, the commercialization of general intellect, recognize the university as a key site of the production of value and of class struggle (Edu-Factory Collective, 2008). Immaterial, affective and intellectual labor are increasingly important for producing value in this post-Fordist system (Lazzarato, 1996; Hardt and Negri, 2000). This thesis is important for 3Cs' understanding of the university; accordingly, even student leisure time can produce value within the social factory of the university through adding to the branding of the university (Bousquet and Nelson, 2008). The thesis does not suggest that all labor is immaterial, but instead that the production of immaterial goods is increasingly indicative of the organization of and expectations put on labor more generally. Information, technology and cognitive skills are even important for what is generally considered material labor, challenging this very distinction. For example, many workers today are expected to constantly improve their technological knowledge and managers judge those workers on affective qualities such as attitude. While no one should focus too narrowly on immaterial labor, an open definition allows 3Cs, among many others, to identify women's unpaid domestic labor, the production of culture and language we all participate in, and work that explicitly produces knowledge. Because of the geographically diffused and temporally fluid nature of this labor, cartographic practices are necessary to analyze and to politically organize this work. 3Cs specifically maps the shifting positions and labor conditions of university workers, recognizing the significant role their labor plays in the overall economy.

Many of the elements of current militant research that influence 3Cs trace back to the Italian practice of *conricerca* (co-research). Starting in the 1960s, academics and activists collaborated with workers to research the material and subjective conditions of new forms of labor (Negri, 2003). *Conricerca*, according to its contemporary practitioners, "developed as communication and cooperation, as a process of resubjectification and counterformation, and as a forum for the autonomous political representation of the 'organized spontaneity' of the workers" (Borio et al., 2007, 168). These practices challenged the division between academic research and political action in the hopes of cooperatively producing new knowledges (Roggero, 2008). In this paper, we focus on current, self-described practices of militant research: research that produces knowledge for social struggle and is itself a form of political intervention. It has multiple, situated approaches that defy a singular, abstract definition. Here, we examine three cases that shaped our own practices of militant research.

Colectivo Situaciones

The first militant research collective that directly informs 3Cs is Colectivo Situaciones of Buenos Aires. Through its research, Situaciones attempts to break down the subject-object divide to build mutual understanding and social change. Instead of idealizing objectivity and/or critical distance, Colectivo Situaciones describes the relationship between the researcher and researched as one of love or

friendship. This is a relationship in which both parties actively participate and are transformed in the process (Colectivo Situaciones, 2002). According to this theory, all knowledge production affects and modifies the bodies and subjectivities of the participants, and is an essential part of any political practice. Therefore, "the co-production of critical knowledge generates rebellious bodies. Thought about rebellious practices gives value and power (potencia) to those practices" (Malo, 2007, 35). This research methodology acknowledges that research subjects also produce knowledge and that researchers also engage in political struggle. Situaciones collaborates with social movements and subaltern groups to produce collective research practices and knowledges as a form of political struggle, recognizing that "collective thought generates common practice" (Malo, 2007, 35).

Not only is Colectivo Situaciones' militant research an alternative to traditional academic research, it is also an alternative to traditional forms of activism. It is a manner of doing politics that takes nothing for granted, leaving no room for the easy answers of dogmatic ideologies or party lines (Colectivo Situaciones, 2002). Situaciones' way of doing political work emerged as part of a wave of autonomous, anti-capitalist organizing in Argentina following the country's 2001 economic collapse. They maintain long-term relationships with many of these movements, including unemployed workers movements, neighborhood assemblies, and recovered factories. Situaciones works with these groups by holding workshops and mutual interviews in which both parties question each other. Each of their books emphasizes the situatedness of any political struggle, making universal, pre-known answers impossible and calling for continual investigation and questioning (Colectivo Situaciones, 2002; 2008).

Precarias a la Deriva

Precarias a la Deriva (Precarious Women Adrift) is a feminist collective in Madrid that demonstrates the power of militant research and autonomist concepts in the current economy, particularly through their use of the drift method. The group formed when major labor unions in Spain called a general strike in 2002 and a number of women realized they were not in a position to participate. How could temp workers, the self-employed, workers on per-hour contracts, and domestic workers (to name a few) strike? Who would even notice? These questions, paralleling 3Cs founding questions about labor in the university, highlight the conditions and experiences of precarious workers in the current economy.[3] In addressing these questions, Precarias initiated the picket-survey as a form of militant research. They visited sites of precarious labor where workers were unable

---

[3] The Frassnito Network defines precarity as the following: "Precarious literally means unsure, uncertain, difficult, delicate. As a political term it refers to living and working conditions without any guarantees: for example the precarious residential status of migrants and refugees, or the precariousness of everyday life for single mothers. Since the early 1980s the term has been used more and more in relation to labour. Precarious work refers to all possible forms of insecure, non-guaranteed, flexible exploitation: from illegalised, seasonal and temporary employment to homework, flex- and temp-work, to subcontractors, freelancers, or so called self-employed persons" (2006).

to participate in the general strike and asked these workers a provocative question: what is your strike? Or, what does it mean to go on strike in your situation? (Precarias a la Deriva, 2003). Asking this question serves multiple purposes. First, it stops the production process for a few minutes, a sort of mini-strike. Second, it investigates the conditions of work/life in the contemporary economy. Third, it establishes connections among a disparate group of workers and opens up a space for future organizing.

From this experiment, the Precarias developed their own drift method. Their drift was inspired by the Situationists' derive, but crafted specifically for their own context and struggles (Debord, 1956; Precarias a la Deriva, 2005). In each drift, a different precaria leads the group of drifters through her everyday trajectory, discussing her life and answering questions along the way. As opposed to the Situationists' use of the derive to understand the literal structure of the city, the Precarias' drift is a directed itinerary through the specific conditions of their everyday lives as social subjects. Drifting proved useful in exploring the spatial practices of precarious workers, who are often not confined to a singular or stationary workplace. The Precarias use these drifts to find intersection points between distinct and atomized itineraries in urban space from which to intervene and wage a struggle together (Precarias a la Deriva, 2003b). Through these drifts, the Precarias developed their own understanding of the social factory and immaterial labor theses (2005). This analysis shows common features amongst all forms of immaterial labor, while recognizing that there are hierarchies and differences as well.

This innovative research-intervention methodology allows the women of Precarias a la Deriva to experiment with alternative forms of political organization outside traditional political parties and trade union structures. Through the drifts, the Precarias not only investigate their situations, they also enact new, lived spaces of everyday life and create new practices and networks of resistance. Documenting these collective drifts and conversations generate a better understanding of the conditions of precarity. They allow women with different backgrounds and experiences to recognize not only their differences, but what they have in common (Precarias a la Deriva, 2003a; Casas-Cortes, 2009).[4]

Hackitectura

Hackitectura is a small group of militant mapmakers in Spain who participate in constantly evolving transnational, transcontinental activist networks. Starting in the early 2000's, they were part of a network of activists confronting the militarization of the Spanish-Moroccan border. This project was an effort to rethink and reshape the border region by integrating international networks of people and wireless technology (Cobarrubias, 2009).

---

[4] See http://www.sindominio.net/karakola/spip.php?article74

Hackitectura works as a map-making node in these networks. While Hackitectura's core membership is composed of only a few people, each mapping project intentionally constructs a much larger topical network that includes artists, researchers and activists in the map-making process. This networking not only produces and disseminates the map, but also integrates these participants into the alternative practices plotted on the map. Hackitectura's members directly cite Deleuze and Guattari's understanding of mapping to create new possibilities and in this case, border regions (Cobarrubias, 2009).

Hackitectura's map *Cartografía del Estrecho* (Cartography of the Straits of Gibraltar) (*detail, figure 1*) creates an alternative understanding of the Spanish-Moroccan border region. The border is not an abstract geopolitical line but an increasingly complicated, contested space. The inversely oriented (north at the bottom) map highlights connections between southern Spain and northern Morocco to show a single region. A multitude of migrants enters Europe in flows, past motion sensors, semi-military repression and expulsion. The idea of the map is to follow the flows that already traverse the border, such as migrants, Internet data and cell phone calls, as well as capital and police. The flows reshape the very border into a border region. In this mapping project, Hackitectura and their collaborators map the border region to contest and transcend it. Doing so depicts and literally helps produce a different kind of border than the crisp, abstract lines in a traditional atlas (Cobarrubias, 2009).

The Counter Cartographies Collective

The combination of the ideas and practices we discuss above forms the basis of 3Cs' autonomous cartography. By combining contemporary autonomous theory, practices of militant research and Pickles' Deleuzian conception of counter-mapping, "and, and, and…", 3Cs works to proliferate ways of visualizing and realizing new possibilities (Pickles, 2003). For example, the maps of Hackitectura create the possibility of more effective and better networked migrant organizing. Colectivo Situaciones and Precarias a la Deriva demonstrate ways in which militant research produces new subjectivities and social relations. Autonomist theory emphasizes the importance of cognitive labor today and the necessity of investigating transformations in class composition. Informed by all of these ideas, our research/mapping is an intentionally political project to create new ways of viewing and inhabiting the university/world, and new ways of relating to and living with others. Through the mapping process, we form alliances between individuals and collectives and create different methods of political action. In the following portion of the paper, we examine several of 3Cs' initiatives that exemplify mapping as militant research and the effects of 3Cs' work.

The Spark: Labor Day 2005

3Cs originally formed not with a set mission or clearly defined set of goals, but rather as a group of people with common interests and methodological commitments. Our frustration with the conditions of academic inquiry merged

with our organizing at the university around working conditions for students and staff. These concerns crystallized with the partial cancellation of Labor Day and prompted us to begin mapping our own spaces and trajectories.

Figure 1: Hackitectura, Cartografía del Estrecho, detail

Those of us who acted on Labor Day were part of several groups at UNC-Chapel Hill working on rethinking Cultural Studies and the relationship between research and activism.[5] We were frustrated with the continual talk among activist scholars on campus about their own geographically disparate interests. We found that much of this work, while attempting to contest divisions between academia and activism, reinforces the divide by geographically separating intellectual production within the university from activism outside. Instead, we wanted to do something politically and intellectually relevant to all of us. The as-of-yet unnamed Counter Cartographies Collective began as a spin-off reading group focusing on these topics of the role of the university in contemporary capitalism, counter-mappings and militant research (Terranova and Bousquet, 2004). Meanwhile, UNC's administration selectively canceled the Labor Day holiday; giving some workers, including the administration, the day off, but not students, educators or researchers. We realized the day presented an opportunity for action. How to protest? Where to protest? Was this a labor protest? How could we, through understanding these processes, begin to enact a different university?

With these questions and inspired by Precarias a la Deriva's query, "what is your strike?" we began our own situated drift (2005). We located ourselves at the campus social center with chalkboards, signs, butcher paper and recording devices. We asked passers-by to talk about their own work by filling out questionnaires, drawing maps and participating in interviews. We explored campus, visiting working classrooms and closed-for-the-holiday offices, mapping where work was or was not taking place.

The drift proved useful because of its dual nature as a research tool and a method of spatial intervention. Drifting provoked different reactions amongst people passing by: confusing reporters as to whether it was "research" or a "protest", and encouraging students and faculty to participate in our project and reflect on their own labor. It was a way not only to explore spaces but also to inhabit them differently. It began to teach us the importance and complexity of our own situation. Due to the landscape and culture, drifting in a suburban North Carolina college town is very different from Situationist drifting in Paris or Precarias drifting in Madrid. Still, our situations held many similarities with European drifters. Many people we talked to worked on temporary contracts with little job security. Some worked multiple jobs or part-time with no fixed hours and low pay. Our interest piqued, the proto-Counter Cartographies Collective continued research and drifting to explore the labor and space of knowledge production beyond Labor Day. We found an expensive and growing administration separated from the concerns of university workers. We found an increasing push for privately funded research in the competition for total research dollars. Looking deeper, we found fuzzy lines between work and leisure in

---

[5] Groups included the Social Movements Working Group (http://www.unc.edu/smwg/) and the Cultures of Economies research group (http://www.unc.edu/~jpickles/COE/Scope/scope.html).

university spaces constructed to spark creative entrepreneurship, a specific subjectivity of the knowledge worker (Holmes, 2007).

Through that Labor Day drift and subsequent conversations, we began to understand our own work in the university. Our research, writing, and teaching are productive labors and indicative of broader economic shifts. This work falls into the category of immaterial labor: labor that produces the informational, cultural, communicative, and affective aspects of commodities (Lazzarato, 1996; Shukaitis and Graeber, 2007). This labor is spatially organized very differently from Fordist labor: no longer centered in the factory, or even an official workplace, immaterial labor is geographically diffuse, occurring in all of the spaces we occupy on a daily basis. The lack of a common space makes organizing these workers a difficult task, a difficulty to which mapping is the perfect response. Counter-mapping identifies the sites where immaterial labor takes place and creates a common space of encounter, bringing workers together to share the experiences of their labor. Acknowledging our situation as workers helped us see ourselves in solidarity with other workers and opened the door to further mappings of UNC-Chapel Hill.

DisOrientation Guide

This mapping collaboration blossomed into the most widely known 3Cs project to date, DisOrientations: your guide to UNC-Chapel Hill, a cartographic version of the popular tool for university activism (*front: figure 2; reverse: figure 3*). The DisOrientation Guide multiplies understandings of the University of North Carolina at Chapel Hill to dispel notions of the university as an aloof ivory tower, segregated from the so-called real world. We mapped UNC as a multiplicity of processes with many entrances and exits, thoroughly integrated with local and global economies of knowledge production.

The visual chaos of the guide on first viewing is an intentional attempt to explode any simple, singular or territorial notion of the university. A close look reveals a framework, but even that is not discrete. The margins of each theme substantively and graphically merge into others. Three general concepts, corresponding to different theoretical perspectives, organize the front of the guide. The reverse side serves as a response, to re-orient the viewer.

UNC is a factory. Guided by a Marxist analysis, this concept plots the university within regional and global relations of knowledge production and labor. Maps show the dense network of higher education and corporate knowledge production in which UNC is located. Corporations at the Research Triangle Park profit from the results of publicly funded and cooperatively produced knowledge in the university, as well as the labor of university workers. This regional economic growth regime shapes the university. Students not only learn the course material, but also to be researchers, programmers and inventors, becoming accustomed to

precarious living and working conditions in order to fuel the creative economy (Moten and Harney, 2004).
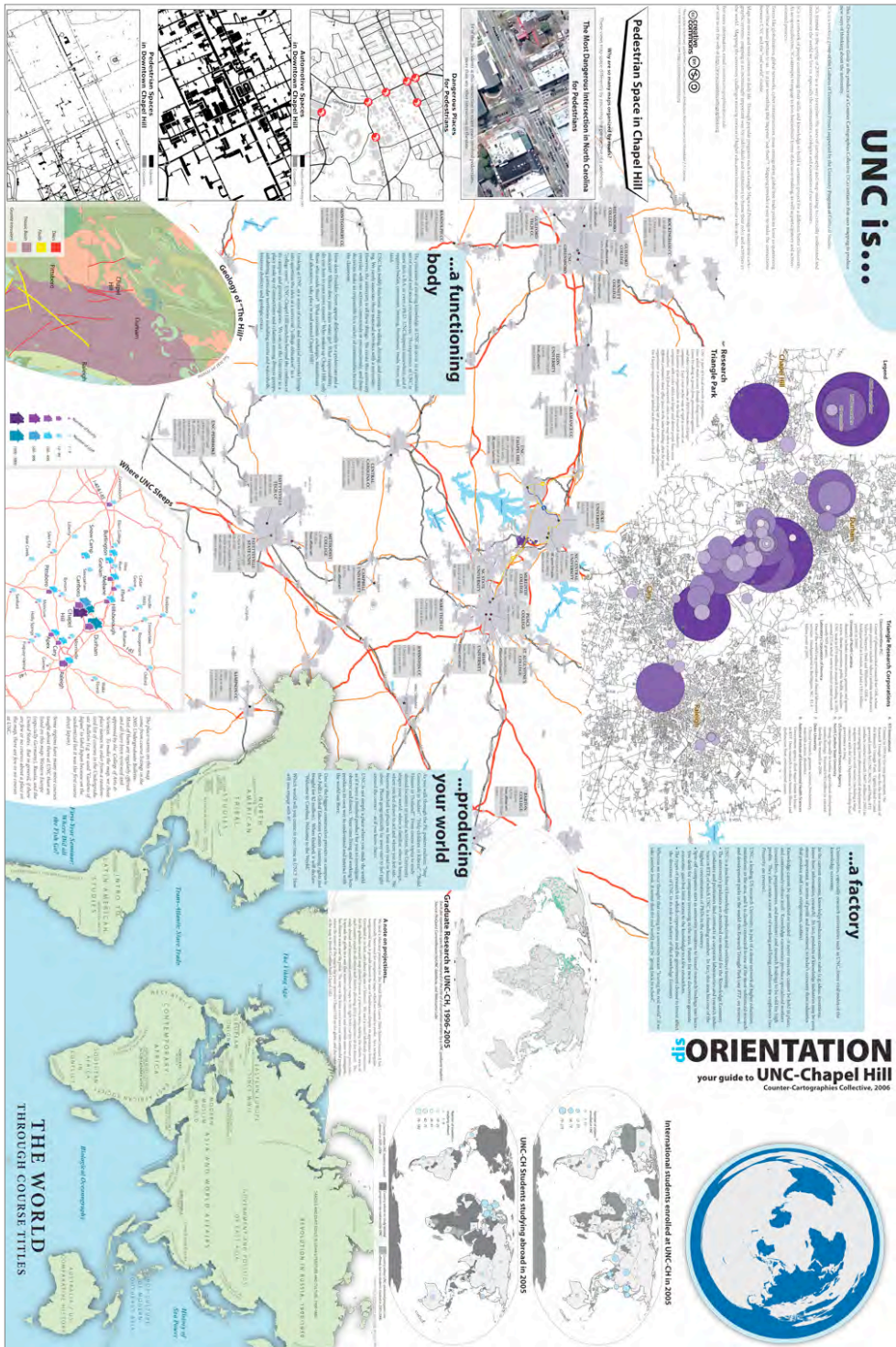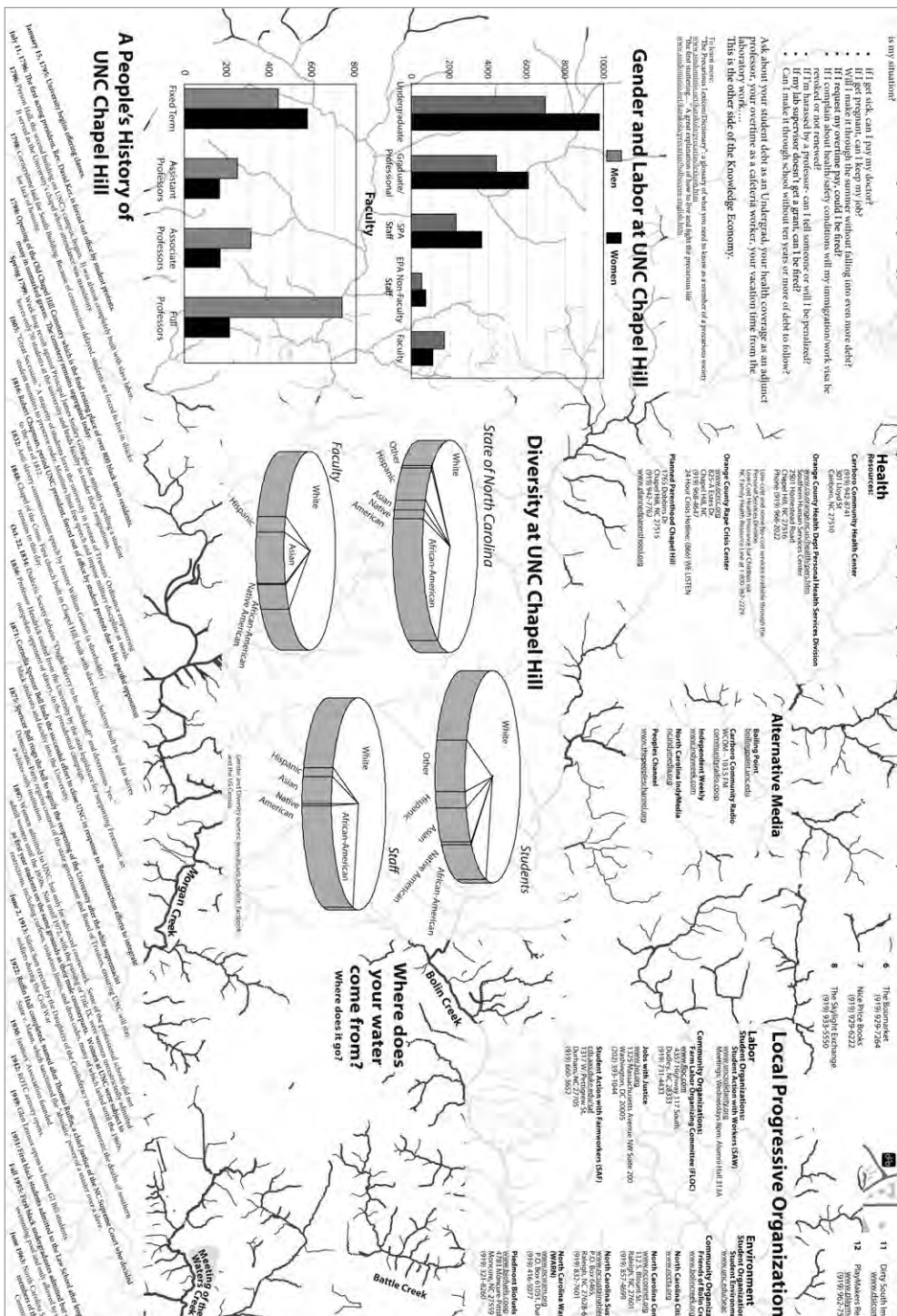

Figure 2: disOrientation guide (1) front

Figure 3: disOrientation guide (1) back

UNC is a functioning body. Guided by Deleuzian and Actor Network Theory ideas, this concept highlights how UNC is materially embodied. Knowledge production and immaterial labor cannot be composed purely of abstraction

(Deleuze and Guattari, 1987). The university is composed of people that eat, sleep, travel, use natural resources and profoundly affect the environment they inhabit. The maps in this section investigate the practices and networks that literally make up the university. Maps include where faculty and staff sleep (live) and how spaces, such as tiny pedestrian areas and wide automotive roads are defined in and around the university. Different appropriations of space affect how we envision and occupy the university.

UNC is producing your world. Guided by Foucault's analysis of the productive interplay of power and knowledge, this portion maps UNC-CH's role in the production of (geographic) subjects as global citizens in a particular discourse about the world (Foucault, 1995). Maps show where UNC students study abroad, where foreign students come from, and what parts of the world are studied in undergraduate courses. From these maps, we see that UNC is highly focused on the United States and Europe. Some places, such as popular study abroad destinations Florence and London, appear large in the university's worldview while others do not appear at all.

Reorientations. The reverse side of the DisOrientation guide further multiplies UNC-CH through a people's history of the university and a directory of local progressive organizations. A local economies map draws on Gibson-Graham's writings on local, diverse economies (1996, 2006). From cooperatively owned and managed bookstores and grocery stores to a Really Really Free Market where items and services are freely shared and exchanged, Chapel Hill is already awash with non-capitalist practices. This side of the DisOrientation Guide serves as a useful guide for newcomers to the area. It also illustrates that many other universities are not only possible, but are already being enacted.

Through these concepts, the DisOrientation Guide brings together mapping and militant research in a visual, cartographic product. Nonetheless, this autonomous cartography is not completely encapsulated on paper. Like the groups discussed above, the importance of our work extends beyond the map to the process of map-making and of distributing and sharing the map.

3Cs members assembled the DisOrientation guide in mid-2006 at regular meetings, brainstorm sessions and socializing. Trust among friends created an open atmosphere for collaborative map-making and theoretical heavy-lifting. Not everyone entered the process with the same background or expertise, yet we avoided assigning permanent roles. In fact, the uneven distribution of expertise motivated us to socialize that knowledge, teaching each other skills and techniques throughout the process. For example, the one of us with basic cartographic training did not do all the graphic design, but rather took the opportunity to share cartographic methods to other members of the collective. Such a collaborative process is often contentious and difficult to sustain. Positive, flexible attitudes, food (especially pizza) and regular breaks are imperative to keep the process moving forward.

At each meeting, members shared new map ideas, research and cartographic design drafts. Early in this process, we decided on the general concept of the guide, but not the internal framework. Through our continuing conversations and mapping, our theoretical analysis and practical understanding of the university began to emerge. The framework of the guide came together in a single marathon meeting that set up the three-concept front side. Even with the framework in place, the guide took another month to design and print before its release at the beginning of the 2006-2007 school year. 3Cs printed 1500 guides using a grant from UNC's Cultural Studies program. We continue to distribute DisOrientation Guides for free through student and activist networks, undergraduate classes, and local community centers.

DisOrientations[2]

While distributing the first guide, 3Cs continued to conduct research and map knowledge production. Out of this work, we produced other graphic products, including a comic book about UNC-CH's drive to build a research campus, a zine about budget cuts and, in 2009, a second DisOrientation Guide (*outside: figure 4; inside: figure 5*).[6] DisOrientations[2] focuses on UNC-CH within the mutually related crises of the university and the economy. This new guide, however, is not just about economic value. It deals with the multiple subjective experiences of inhabiting the university at this moment and the struggles taking place in higher education locally, nationally and internationally. Much like the first DisOrientation Guide, the idea of DisOrientations[2] is to explode the notion that UNC and other universities have a simple, singular problem, a budget shortfall. DisOrientations[2] includes maps and graphics of the game of university rankings, the role of migrants in knowledge production, the precarious labor conditions of many university employees, and struggles for alternative higher education around the world. Following the first guide, DisOrientations[2] plots multiple processes and existing equitable alternatives to current university struggles. Our inclusion of national and global processes such as migration and rankings is an attempt to generate new networks and alliances with struggles in different places as part of our political project.

Collaboration

When we launched the first DisOrientation Guide, we were surprised to find that it had real value for other activist groups, many of whom are outside Chapel Hill. Though working with distant activists was not a stated goal from the outset, it turned out to be a tangible and fruitful result of our mapping process.

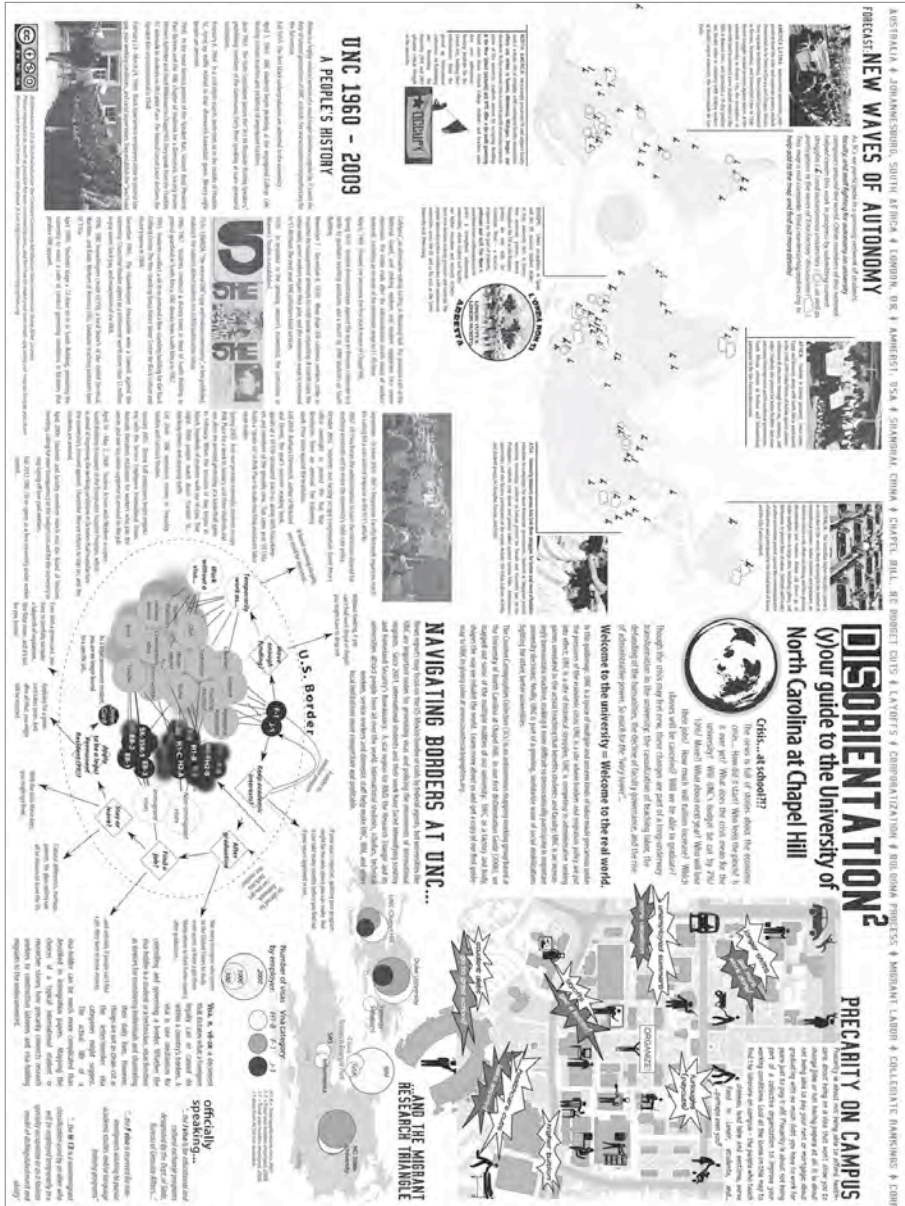[6] The comic book and zine, as well as other 3Cs' documents are freely available at:
http://www.countercartographies.org/documents-mainmenu-32

Figure 4: disOrientations² outside

The relevance of both DisOrientation guides beyond UNC allows for greater conversations and collaboration through mapping with other groups. These are processes of sharing and creating knowledge, forming relationships, and producing new subjectivities. All three are key elements of the militant research practiced by Colectivo Situaciones and others. Over time, this sort of networked, inter-group collaboration became increasingly important. In retrospect, these actions resemble the interpersonal and inter-group collaborations of Precarias a la Deriva and Hackitectura. 3Cs participates in forums, such as Edu-Factory, Rethinking the University and The Pedagogical Factory (Dalton and Stallmann,

2007).[7] We have traveled to Chicago, New York, Minneapolis, Madrid, Barcelona, Rome, Bologna, Zurich and London to share our work and participate in new collaborations. These collaborators are also interested in challenging notions of the university as a discrete and separate space, and each one adds different political experiences, analyses of higher education, and research practices.
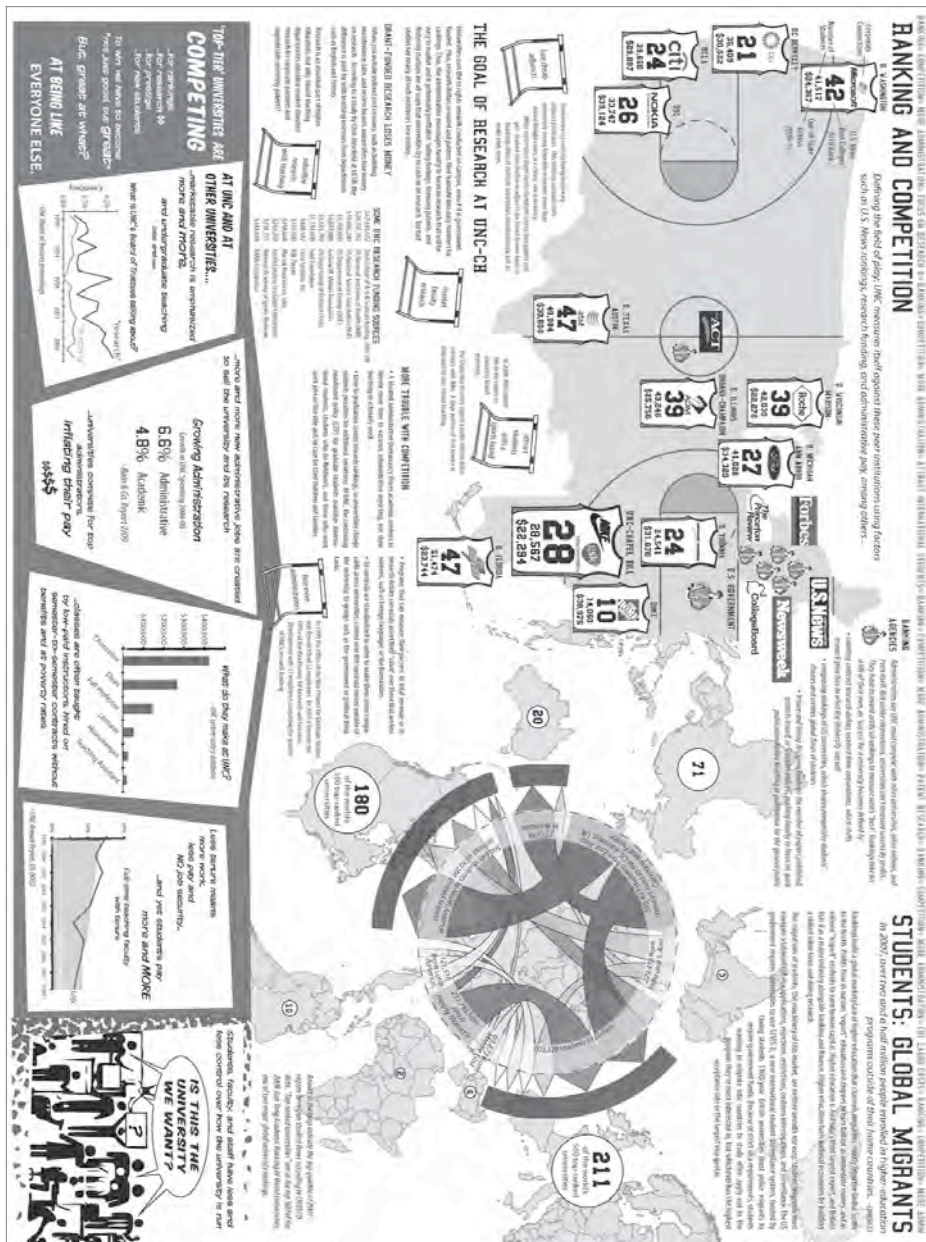

Figure 5: disOrientations[2] inside

[7]See http://www.edu-factory.org, http://rethinkingtheu.wordpress.com/ and http://beneaththeu.org/Beneath_the_University/home.html

In North Carolina, the DisOrientation guides serve as a basis to collaborate directly with a number of other autonomous groups and mapmakers. Together, we organized two *Counter Cartographies Convergences*, centered on conversations, workshops and exhibitions with local, national and international mapmakers. Convergences are a way of fostering conversation and collaboration between all kinds of mapmakers in North Carolina by providing exhibit space and a public invitation to "come and bring your maps!" The events both tap into and catalyze an energy of creative counter-mapping. They are a forum for all of us to meet, network and learn from each other's concepts and experiences, building new mapping projects and subjectivities. Participants include anyone interested in exploring the possibilities of mapping, including Brian Holmes, Lize Mogel and Alexis Bhagat, Kanarinka, the Beehive Collective, Elin O'Hara Slavick, and Pedro Lasch. Other experimental mapmakers include Denis Wood , Kevin Webb, Gary Kueber, Phillip Barron and Anna Lena Phillips. Alongside 3Cs' focus on labor and knowledge production, these conversations and maps address topics and struggles of gentrification, local history, urban form, food and farming, politics, government and war. Through sharing these different perspectives, all participants are able to build stronger analyses of the contemporary situation, as well as new alliances for local struggles. The convergences are self-organized by all participants, putting into practice our ideas of alternative forms of knowledge production.

Drawing from these experiences, we made the production and distribution process for DisOrientations[2] collaborative. In the spring of 2009, 3Cs positioned itself as part of an autonomous political network at UNC and numerous other American universities that confronts and contests continuing budget cuts, tuition hikes and layoffs. We used this context to gather information and input for the guide and then also to distribute it. At UNC-CH, the guide helped serve as a basis for organizing with other students, staff and faculty in workshops, protests and meetings, most prominently during the week of March 4th 2010.

Though we did not envision such practices at the outset of our research, collaborations and convergences in particular indicate something important and useful about autonomous cartography. Through collaborations, 3Cs does more than inspire others to work toward a political goal by viewing maps. 3Cs intentionally employs self-inquiring autonomous research with a cartographic twist. Such events and partnerships show a way to collaboratively proliferate and catalyze counter-mapping itself as a process. Autonomous cartography has the capacity to collaboratively excite and create new mapmakers, thereby effectively proliferating counter-mapping and its struggles.

The Impacts of 3Cs' Autonomous Mapping

We were conceptually unprepared for the wide, positive reception of the first DisOrientation Guide. In undergraduate and graduate classes, the guide prompted interesting discussions about students' labor, faculty salaries, and the university's

relations with other social and economic institutions. However, the effects of the guide for those students beyond the classroom are hard to assess. More significantly, we found ourselves distributing the guide far beyond Chapel Hill and collaborating with others interested in mapping as a part of their struggle. These engagements show how autonomous mapping can prompt people within and beyond Chapel Hill to question their own situations and produce multiple alternative geographies. Over time, the purpose of 3Cs grew to include not only building our political power through mapping UNC-CH, but also using counter-cartography to create relationships and networks with others engaged in struggles in Chapel Hill and other centers of knowledge production. This kind of collaborative organizing through mapping illustrates the tangible results of 3Cs' labor.

Producing lasting, radical social change through the production of new subjectivities and social relations is a long and difficult process. Like other forms of militant research, autonomous cartography can play an important role in this struggle. Within our own collective, our projects have re-shaped our experiences of higher education through instilling practices of mutual support and care and providing an alternative to the competitive pressures of academia. This subjective transformation is a key part of any militant research practice. As Italian activists explain, "conricerca is important as a space for the political counterformation of militants more than for the results it offers" (Borio et al., 168).

Beyond the collective, students, faculty and community members use 3Cs' guides, zines and workshops for information and inspiration in organizing around budget cuts, tuition hikes and other issues. For example, our maps about student labor helped graduate students embrace their position as workers and reactivate their organizing efforts after the dissolution of a UNC-CH graduate student union in 2005. 3Cs' maps help connect movements, such as anti-gentrification struggles in the town of Chapel Hill and student struggles on campus. In addition, our practices of horizontal organizing and consensus-based decision-making have informed the practices of other successful organizing and research initiatives in Chapel Hill.

3Cs' materials and collaborations have also had impacts beyond Chapel Hill. We are regularly approached by groups from other universities who, inspired by our mapping, want to hold counter-mapping workshops or even to produce their own map. Locally, we worked with a social center in Durham, NC to map the city's gentrification, and Raleigh, NC high school students fighting against the re-segregation of their schools. On a broader scale, 3Cs members have led workshops and made maps in Minneapolis, Chicago, London and Barcelona. Still others, such as the transnational Edu-factory collective, include 3Cs' work in general analyses of global transformations in higher education and finding common ground to organize around (Casas et al., 2009). 3Cs' autonomous cartography is successful in that it informs and inspires autonomous organizing at our university and others. Furthermore, these processes help produce self-consciously political subjects and

related knowledges in those geographic contexts. Both at UNC-CH and in other centers of knowledge production, autonomous cartography produces collective knowledges about local conditions of higher education and common political practices to intervene in those situations.

Continual questioning and the production of alternative knowledges through collaboration run parallel to recent theorizations of mapping and critical GIS as a practice (Kitchin and Dodge, 2007; Brown and Laurier, 2005; Elwood, 2010). Bringing together the active mapping of Pickles and Holmes with the militant research described above emphasizes the productivity and possibilities for action in mapping (Pickles, 2003; Holmes, 2003). The collaborative aspect resonates with Colectivo Situaciones' and Precarias a la Deriva's use of militant research that transcends categories of "researcher" and "researched." The combination of these ideas renders autonomous cartography productive not as an administrative tool, but as a new geographic way to live and struggle in the knowledge economy.

3C's counter-mapping logic of "and, and, and..." constitutes a political and ethical project, with all of the risks that involves (Pickles, 2003). While 3Cs works to create non-hierarchical and non-state-oriented maps and mapping practices, this knowledge production may be subverted, co-opted or suffer from other documented problems of counter-mapping (Elwood, 2006; Bryan, 2009). 3Cs carefully navigates these political and ethical straits without allowing them to paralyze our mapping practices. This leads to constant questioning and conversations within the collective about the topic, purpose and means of the initiative at hand. Sometimes we choose not to make a given map at all. For example, although we are interested in the role of undocumented migrants at UNC-CH, we do not map these migrants because such as map would likely cause them harm. Instead, inspired by Hackitectura, we map border-regulating institutions and systems of migration. In general, we hold a commitment to mapping our own situation and our own struggles, while working with others attempting to do the same from their location. For us, solidarity involves confronting capital and neoliberalism wherever one is located, rather than attempting to aid others from a distance.

3Cs is fortunate to work in an environment with Cultural Studies, Geography and Anthropology programs with resources to support our research and printing costs. This position in a university also affords access, networks and tools that are substantially less available outside the institution. Nevertheless, work by other militant map-making collectives, including Hackitectura, Iconoclasistas in Argentina and the People's Atlas of Chicago show that university support is not essential.[8] Furthermore, part of our project to change the materiality of the university in the current knowledge economy includes sharing university

---

[8]Iconoclasistas (http://iconoclasistas.com.ar/), the People's Atlas of Chicago
(http://chicagoatlas.areaprojects.com/)

knowledges and resources with mapping comrades outside of the university. These practices build on Moten and Harney's argument that the only ethical relationship to the university must involve the redistribution of its resources (2004).

Conclusions

Autonomous cartography opens up possibilities for new forms of knowledge production and political change. As Colectivo Situaciones and Precarias a la Deriva show, militant research offers radical, situated methods of producing knowledge as political practice. Hackitectura's work demonstrates how social movements use mapping as part of a political project. In this paper, we lay out the theoretical foundations, cartographic practices and experiences of 3Cs, with the hope that it proves useful to others wishing to engage in similar projects of autonomous cartography.

By producing maps as militant research, autonomous cartography constitutes a conceptual framework for understanding and creating geographic and political change in the post-Fordist economy. This work is premised on the idea that geographic knowledge and spatial innovation are created from movements and people engaged in struggle, thus giving rise to autonomous politics within the collective. 3Cs' experiences with autonomous cartography illustrate how mapping can function as a form of militant research, producing new knowledges and subjectivities, while also investigating and instigating political change. The mapping process itself enacts a different form of knowledge production that creates new social relations and geographies. In short, it is the initial cartography of an autonomous university. For 3Cs, this means not only producing new maps, but also creating new forms of social organization within and beyond the collective. These experiences highlight the importance of collaboration, trust, and careful consideration of the social context and ethics of that mapping research.

As autonomous cartography spreads to other organizing contexts, 3Cs worked with students at Queen Mary University in London to produce a counter map examining the relationship between international migrant flows and cognitive labor. In recent months, 3Cs has led a series of workshops to share mapping skills with activists within and beyond the university on themes of gentrification and food justice. Around the world, new spaces of resistance and knowledge production are emerging as universities and communities face budget cuts and economic crises. Simultaneously, the make-up of 3Cs itself is changing. Several members are moving to different locations around the world, forcing us to rethink the locally-situated nature of our research and develop new methods of collaboration across space and time. Despite new contexts and challenges, 3Cs and others continue to explore the political possibilities of and, and, and…

Acknowledgments

References

Aberley, Doug (ed.) 1993. *Boundaries of Home: Mapping for Local Empowerment*. Philadelphia: New Society Publishers.

Bousquet, Marc, and Cary Nelson. 2008. *How the University Works: Higher Education and the Low-Wage Nation*. New York: NYU Press.

Bozzio, Guido, Francesca Pozzi, and Gigi Roggero. 2007. Conricerca as Political Action. In, Mark Coté, Richard Day, and Greig de Peuter (eds.), *Utopian Pedagogy: Radical Experiments Against Neoliberal Globalization*. Toronto: University of Toronto Press, 163-185.

Brown, Barry and Eric Laurier. 2005. Maps and Journeys: An Ethno-Methodological Investigation. *Cartographica* 40(3): 17-33.

Bryan, Joe. 2009. Where Would We Be Without Them? Knowledge, Space and Power in Indigenous Politics. *Futures* 41(1): 24-32.

Bunge, William. 1971. *Fitzgerald: Geography of a Revolution*. Morristown, NJ: General Learning Press.

Casas-Cortes, Maria Isabel. 2009. *Conocimientos Precarios*. *Social Movements as Sites of Research and Transformation in a Globalized Europe*. Unpublished Ph.D. dissertation. The University of North Carolina at Chapel Hill.

Casas-Cortes, Maria Isabel, and Sebastian Cobarrubias. 2007. Drifting through the knowledge machine. In, Erika Biddle, Steven Shukaitis and David Graeber (eds.), *Constituent Imagination: Militant Investigations, Collective Theorization*. Oakland, CA: AK Press, 112-126.

Casas-Cortes, Maria Isabel, Sebastian Cobarrubias, Craig Dalton, Elizabeth Mason-Deese, John Pickles, and Timothy Stallman. 2009. Practices of Radical Cartography. In, Edu-factory Collective (eds.), *Toward a Global Autonomous University*. New York: Autonomedia, 110-113.

Chrisman, Nicholas. 2005. Full Circle: More Than Just Social Implications of GIS. *Cartographica* 40(4): 23-35.

Cleaver, Harry. 2006. Paths of Autonomy. Keynote address to the Conference on La Autonomía Posible: Reinvencion de la política y emancipación at the Universidad Autónoma de la Ciudad de México, October 24-26 2006. Available at: http://www.elkilombo.org/paths-of-autonomy/

Cobarrubias, Sebastian. 2009. *Mapping Machines: Activist Cartographies of the Border and Labor Lands of Europe*. Unpublished Ph.D. dissertation. The University of North Carolina at Chapel Hill.

Cobarrubias, Sebastian, and John Pickles. 2008. Spacing Movements. In, Barney Warf and Santa Arias (eds.), *The Spatial Turn: Interdisciplinary Perspectives*. New York: Routledge, 36-58.

Colectivo Situaciones. 2008. *Un Elefante en la Escuela: Pibes y Maestros del Conurbano*. Buenos Aires: Tinta Limón.

_____. 2002. *Hipótesis 891*: *Más Allá de los Piquetes*. Buenos Aires: Ediciones Mano en Mano.

_____. 2001. *Contrapoder: una introducción*. Buenos Aires: Ediciones Mano en Mano.

Craig, William J., Trevor M. Harris and Daniel Weiner, (eds.) 2002. *Community Participation and Geographic Information Systems*. London: Taylor & Francis.

Crampton, Jeremy. 2010. *Mapping: A Critical Introduction to GIS and Cartography*. New York: Blackwell Publishing.

_____ 2003. *The Political Mapping of Cyberspace*. Chicago: The University of Chicago Press.

Crampton, Jeremy and John Krygier. 2005. An Introduction to Critical Cartography. *ACME* 4(1): 11-33.

Dalton, Craig and Timothy Stallmann. 2007. How We Make a DisOrientation Guide to Our University. Presentation, Pedagogical Factory: Exploring Strategies for an Educated City. Hyde Park Arts Center, Chicago, Sept. 15, 2007.

Debord, Guy-Ernest. 1956. "Theory of the Dérive." In *Les levres neus*. Trans. Ken Knabb. Vol. 9. Available at: http://library.nothingness.org/articles/all/all/display/314

Deleuze, Gilles. 1988. *Foucault*. Trans. Seán Hand. Minneapolis, MN: University of Minnesota Press.

Deleuze, Gilles, and Felix Guattari. 1987. *A Thousand Plateaus, Capitalism and Schizophrenia*. Trans. Brian Massumi. Minneapolis, MN: The University of Minnesota Press.

Edney, Matthew H. 1993. Cartography Without 'Progress': Reinterpreting the Nature and Historical Development of Mapmaking. *Cartographica* 30(2&3): 54-68.

Edu-Factory Collective (Eds.) 2008. *Universita Globale: Il Nuevo Mercato del Sapere*. Rome: Manifestolibri.

Elwood, Sarah. 2006. Beyond Cooptation or Resistance: Urban Spatial Politics, Community Organizations, and GIS-based Spatial Narratives. *Annals of the Association of American Geographers* 96(2): 323-341.

_____. 2010. Thinking Outside the Box: Engaging Critical Geographic Information Systems Theory, Practice and Politics in Human Geography. *Geography Compass* 4(1): 45-60.

Foucault, Michel. 1995. *Discipline and Punish: The Birth of the Prison*. Trans. Alan Sheridan. New York: Vintage Books.

Frassanito Network. 2006. Precarious, Precarisation, Precariat? *Mute* January 9, 2006. Available at: http://www.metamute.org/en/Precarious-Precarisation-Precariat

Gibson-Graham, J.K. 2006. *A Postcapitalist Politics*. Minneapolis, MN: University of Minnesota Press.

_____. 1996. *The End of Capitalism (As We Knew It): A Feminist Critique of Political Economy*. Oxford: Blackwell Publishers.

Hardt, Michael and Antonio Negri. 2000. *Empire*. Cambridge, MA: Harvard University Press.

Harley, John B. 2001. *The New Nature of Maps*. Paul Laxton (ed.), Baltimore: Johns Hopkins University Press.

Harris, Leila M., and Helen D. Hazen. 2005. Power of Maps: (Counter) Mapping for Conservation. *ACME* 4(1): 99-130.

Hodgson, Dorothy L. and Richard A Schroeder. 2002. "Dilemmas of Counter-Mapping Community Resources in Tanzania." *Development and Change* 33: 79-100.

Holloway, John. 2002. *Change the World Without Taking Power: The Meaning of Revolution Today*. London: Pluto Press.

Holmes, Brian. 2007. Disconnecting the Dots of the Research Triangle. *Continental Drift: the Other Side of Neoliberal Globalization*. Independent Blog. Available at: http://brianholmes.wordpress.com/2007/02/26/disconnecting-the-dots-of-the-research-triangle/

_____. 2003. Imaginary Maps, Global Solidarities. In, *Piet Zwart Institute Publications* Piet Zwart Institute. Available at: http://www.16beavergroup.org/mtarchive/archives/000868.php

Kanarinka bot (Catherine D'Ignazio). 2006. *42 Or 363 Definitions of Cartography*. Morrisville, NC: Free Press, Lulu.com.

Katsiaficas, George. 1987. *The Imagination of the New Left: A Global Analysis of 1968*. Boston: South End Press.

Kitchin, Rob, and Martin Dodge. 2007. Rethinking Maps. *Progress in Human Geography* 31(3): 331-344.

Kwan, Mei-Po. 2002. Feminist Visualization: Re-envisioning GIS as a Method in Feminist Geography Research. *Annals of the Association of American Geographers* 92(4): 45-61.

Kwan, Mei-Po and LaDona Knigge. 2006. Doing Aualitative Research Using GIS; An Oxymoronic Endeavor? *Environment and Planning A* 38: 1999-2002.

Lazzarato, Maurizio. 1996. Immaterial Labor. In, Paolo Virno and Michael Hardt (eds.), *Radical Thought in Italy: A Potential Politics*. Minneapolis, MN: University of Minneapolis Press, 133-147.

Leszyzynski, Angieszka. 2009. Quantitative Limits to Qualitative Engagements: GIS, Its Critics, and the Philosophical Divide. *The Professional Geographer* 61(3): 350-365.

Lotringer, Sylvere and Christian Marazzi. 2007. The Return of Politics. In, Sylvere Lotringer and Christian Marazzi (eds.), *Autonomia: Post-Political Politics*. New York: Semiotext(e), 8-23.

Malo, Marta. 2007. *Nociones Comunes : Experiencias y Ensayos Entre Investigación y Militancia*. Madrid: Traficantes de Sueños.

Moreno-Caballud, Luis, and Marina Sitrin. 2011. "Occupy Wall Street, Beyond Encampments." *YES! Magazine*, November, 2011. Available at: http://www.yesmagazine.org/people-power/occupy-wall-street-beyond-encampments.

Moten, Fred and Stefano Harney. 2004. The University and the Undercommons: Seven Theses. *Social Text* 22: 101-115.

Negri, Antonio. 2003. *Logic and Theory of Inquiry: Militant Praxis as Subject and as Episteme*. Trans. Nate Holdren and Arriana Bove. Available at: http://www.generation-online.org/p/fpnegri20.htm

Precarias a la Deriva. 2005. *A Very Careful Strike*. Trans., Franco Ingrassia and Nate Holdren. Available at: http://zinelibrary.info/files/A%20Very%20Careful%20Strike.pdf

_____. 2003a. *First Stutterings of Precarias a la Deriva*. Available at: http://www.sindominio.net/karakola/antigua_casa/precarias.htm

_____. 2003b. *A la Eeriva por los Curcuitos de la Precariedad Femenina*. DVD. Precarias a la Deriva. Madrid: Independent documentary film.

Peluso, Nancy Lee. 1995. Whose Woods Are These? Counter-Mapping Forest Territories in Kalimantan, Indonesia. *Antipode* 27(4): 383-406.

Perkins, Chris. 2003. Cartography: Mapping Theory. *Progress in Human Geography* 27(3): 341-351.

Pickles, John. 2003. *A History of Spaces*. New York: Routledge.

Quintana, Franciso (ed). 2002. *Asalto a la Fábrica: Luchas Autónomas y Reestructuración Capitalista 1960-1990*. Barcelona: Alikornio Ediciones.

Roggero, Gigi. 2008. *La Produzione del Sapere Vivo: Crisi dell'Universita e Transformazione del Lavoro tra le due Sponde dell'Atlantico*. Rome: Manifestolibri.

Schuurman, Nadine. 2000. Trouble in the heartland: GIS and its critics in the 1990s. *Progress in Human Geography* 24(4): 564-590.

Sheppard, Eric. 2005. Knowledge Production through Critical GIS: Genealogy and Pospects. *Cartographica* 40(4): 5-21.

Shukaitis, Stevphen and David Graeber. 2007. Introduction. In, Erika Biddle, Steven Shukaitis and David Graeber (eds.), *Constituent Imagination: Militant Investigations, Collective Theorization*. Oakland, CA: AK Press, 11-35.

Sparke, Matthew. 2005. *In the Space of Theory, Postfoundational Geographies of the Nation-State*. Minneapolis, MN: University of Minnesota Press.

Terranova, Tizziana and Marc Bousquet. 2004. Recomposing the University. *Mute* July 12, 2004. Available at: http://www.metamute.org/en/Recomposing-the-University

Tronti, Mario. 2007. The Strategy of Refusal. In, Sylvere Lotringer and Christian Marazzi, (eds.), *Autonomia: Post-Political Politics*. New York: Semiotext(e), 28-35.

Walker, Peter A. and Pauline E.Peters. 2001. Maps Metaphors and Meanings; Boundary Struggles and Village Forest Use on Private and State Land in Malawi. *Society and Natural Resources* 14(5): 411-424.

Wood, Denis. 2010. *Rethinking the Power of Maps*. New York: Guilford Press.

Wood, Denis and John Fels. 1992. *The Power of Maps*. New York: Guilford Press.

Zibechi, Raúl. 2008. *Territorios en Resistencia: Cartografía Política de las Periferías Urbanas Latinoamericanas*. Buenos Aires: Lavaca.