



2. Tactical Cartographies

Institute for Applied Autonomy

THERE IS A LONG TRADITION of making maps that present alternate interpretations of various landscapes and reveal implicit relationships between power, control, and spatial practice. In this essay, we highlight “tactical cartography”—spatial representations that confront power, promote social justice and are intended to have operational value. (As an example of operational value, think of maps used by military planners.¹) In taking up the term *tactical*, we link cartography with tactical media, an approach to art production that privileges critical social engagement. Since the early 90s the *tactical media* label has become something of an umbrella term for a host of widely divergent media practices embracing themes of political empowerment.² The term has expanded from its origin in interventionist art³ to ultimately include a wide variety of alternative media practices.⁴ In considering the term here, we emphasize its connotations of instrumentality.

At root, tactical media is an interventionist practice that creates disruptions within existing systems of power and control. Less a methodology than an orientation, it is fundamentally pragmatic, utilizing any and all available technologies, aesthetics and methods as dictated by the

goals of a given action. Tactical media are often ephemeral and event-driven, existing only as long as they continue to be effective. They vanish into thin air once their utility has been exhausted, leaving only traces in the form of memories, documentation and journalistic accounts. While it may form a part of a long-term strategy, tactical media itself is concerned with temporary destabilization rather than permanent transformation. Extending these notions to spatial representation, "tactical cartography" refers to the creation, distribution, and use of spatial data to intervene in systems of control affecting spatial meaning and practice. Simply put, tactical cartographies aren't just about politics and power; they are political machines that work on power relations.

Consider Greenpeace's 2001 exposé of illegal logging operations in Brazil. Flying around in small planes, activists used digital cameras and GPS receivers to document illegal logging operations throughout the Amazon. The evidence they collected was ultimately turned over to the Brazilian Environmental Agency, which in turn levied hundreds of thousands of dollars in fines and seized several boats containing over 1,000 illegal logs.⁵ Greenpeace has conducted similar campaigns in Cameroon⁶ and the United States.⁷ In these campaigns, GPS receivers enable environmental activists to achieve material (in the form of fines, arrests, and seizures) and symbolic (negative publicity) victories over well-funded, politically entrenched foes. The activists effectively weaponize spatial data, transforming local observations into slings and arrows to directly assault corporate and governmental privilege.

Activists and artists also employ tactical cartographies to facilitate symbolic resistances, constructing media spectacles that inject critical content into the stream of

daily life. For example, in October 2001 (one month after September 11th and just before the passage of the USA PATRIOT Act), we produced iSee', a website that utilized cartographic representation to contest the rise of surveillance networks. iSee offered viewers an interactive map that enabled citizens to identify and avoid New York City's surveillance cameras, based on data collected by New York Civil Liberties Union (NYCLU) and the Surveillance Camera Players.⁸ With this map, one could produce "routes of least surveillance" that avoided as many cameras as possible between any two points. Given the near-ubiquitous presence of Closed Circuit TV cameras in New York, the often absurdly circuitous routes became sources of both humor and reflection on the changing urban landscape.

As with other projects that document overlooked aspects of physical space, this project represented an inversion of the traditional relationship between maps and dominant power structures by placing the tools of representation in the hands of minority interests. However, farical route-planning capabilities also made iSee newsworthy, enabling the project to insert itself into the very same channels through which public acceptance for surveillance regimes was secured. In a sense, iSee acted as a sort of Trojan horse to deliver critical content to an unsuspecting audience. As news of the project spread through the media, it opened sites of critical discourse in unexpected places including Yahoo's "Travel and Transportation Guide" to New York City, where it has been featured continuously since 2001⁹.

iSee was initially an exercise in media spectacle. It was extended with the addition of camera-mapping workshops in which participants performed data-collection

⁹<http://www.appliedautonomy.com/isee>.

activities, identifying CCTV camera locations, ownership, and other technical details. As we shall see, these workshops performed the dual work of rendering the proliferation of video surveillance legible to a general audience and creating an empirical basis for challenging policing and public safety policy.

The U.S. model of decentralization and privatization means that there are virtually no public records of the number and distribution of surveillance cameras currently monitoring American cities. Because the necessary data does not exist, officials cannot answer simple questions like “how many cameras are there in midtown Manhattan?” Records of camera placement, ownership, and operation are as dispersed, decentralized, and as veiled as the CCTV operators themselves. Because the interests that drive state and corporate data-acquisition and archival activities do not include CCTV cameras in their purview, these nearly-ubiquitous devices do not appear on commercial or government maps and are not documented in information repositories, public or private¹⁰.

The disconnect between official representation of the city and the surveillance practices that influence daily life grows more critical as local surveillance networks are woven together by “remote monitoring” services that stream CCTV data across the city into centralized control rooms operated by low-wage employees. Once limited to individual buildings, CCTV is fast evolving into a surveillance infrastructure, a network of cameras and databases that grows increasingly pervasive and increasingly centralized, under the control of law enforcement and private industry. This evolution is occurring without public discourse or legislative oversight. It is both literally and figuratively “off the map,” beyond the ken of official

understanding. If the growth of CCTV networks is to be documented at all, it will only be through the efforts of grassroots initiatives.

Camera-mapping workshops conducted by groups like the NYCLU, Surveillance Camera Players, and ourselves provide an opportunity for concerned citizens to create public databases documenting the growth and distribution of surveillance technology across the urban landscape. Involvement in these workshops is personally transformative, enabling participants to view the city in a new way and heightening awareness of the city’s surveillance infrastructure. More importantly, the impact of this work transcends individual experience, offering to reconfigure relationships between communities and institutions. Armed with a range of technologies, from wireless PDAs to camera phones, to pen and paper, city dwellers actively document changing material conditions in their neighborhoods, creating public repositories of information and documenting the technologies of control that are transforming their neighborhoods. Once in place, these repositories can become the basis of community-based challenges to the status quo.

As cities like Boston, Chicago, and Washington DC implement city-wide video surveillance programs, grassroots efforts to map CCTV networks take on the crucial role of creating public proofs that both document and challenge emerging infrastructures of control. CCTV maps have rhetorical value in raising awareness and provoking public debate. They also have analytic value, enabling a citizen-science of surveillance in which surveillance systems are monitored and evaluated by the communities they purport to serve. Community-based analysis can respond to interests

beyond the usual considerations of cost and efficiency. For example, overlaying camera location data with census and property value data demonstrates that cameras tend to be clustered in business districts and areas of high economic value, even though the street crime they are purported to deter (e.g. drug dealing, prostitution, robbery) is often more prevalent in poor and working-class neighborhoods. Such maps thus reveal the priorities implicit in surveillance regimes.

The potential for CCTV maps to reframe public discourse is illustrated by the Boston Police Department's 2004 attempt to deploy surveillance cameras in Boston's Chinatown neighborhood—an inner-city working class neighborhood with a sizable immigrant population and a significant crime problem. Many Chinatown residents were initially supportive of the plan. Some believed that the cameras would be an effective crime deterrent, while others were simply pleased to see the BPD take an interest in their neighborhood. (IAA operatives were involved with community organizing efforts in Chinatown during this period. A prevailing attitude among many residents interviewed was that the police considered Chinatown a low-priority area). As details of the program became known, community reaction began to shift. Maps circulated at community meetings made clear that the cameras were to be deployed exclusively along the neighborhood's busy commercial street, rather than in residential areas.¹¹ For some residents, the proposed camera locations reinforced the perception that police officials were far more sensitive to the concerns of Chinatown's business owners—most of whom do not live in the neighborhood—than to its working-class residents. In addition to the predictable debates over privacy and efficacy, discussion within Chinatown began

to focus more broadly on community involvement in setting public safety policy.¹²

Embracing the potential for maps to be used in advocacy is an explicit recognition of maps as rhetorical devices. In short, maps don't merely represent space, they shape arguments; they set discursive boundaries and identify objects to be considered.¹³ When individuals make their own maps, they offer an expression of what they consider important, what they consider to be "of interest," and for what they are willing to fight. In openly acknowledging the rhetorical power of maps and positioning themselves as interested parties taking sides in contentious debates, tactical cartographers offer a direct challenge to the presumed neutrality of mapmakers as mere visualizers of spatial data. Tactical cartographers make claims about landscapes, but also about their own status as authors of spatial narrative. In creating maps that confront power, tactical cartographers claim their right to set the rules of debate and to provide interpretations of local events with both an authority and a contingency equal to official representations.

- 1 Charles Lindauer, "Tactical Cartography: Mapping the Political Battlefield and Targeting Campaign Opportunities in the Computer Age," *Campaigns & Elections*, April 4, 1999.
- 2 McKenzie Wark, "Strategies for Tactical Media" *Realtime* 51, October/November 2002.
- 3 "Critical Art Ensemble," *Digital Resistance: Explorations in Tactical Media*. (Brooklyn, NY: Autonomedia, 2002).
- 4 Joanne Richardson, "The Language of Tactical Media," *Sarai Reader* 2003: Shaping Technologies.
- 5 "Greenpeace Exposes New Season of Illegal Logging in the Amazon," *Common Dreams Progressive Newswire*, July 29, 2001, <http://www.commondreams.org/news2001/0417-01.htm>.
- 6 Greenpeace, "Illegal Logging and the Heart of Darkness," April, 22, 2003, <http://www.greenpeace.org/international/news/illegal-logging-in-cameroun>.
- 7 Richard Rogers, "Why Map? The Techno-epistemological outlook," Media Design Research, Piet Zwart Institute, Willem de Kooning Academy

Hogeschool Rotterdam, March, 2004, <https://pzwart.wdka.hro.nl/mdr/pubsfolder/whymap/>.

- 8 Data for iSee was provided by the New York Civil Liberties Union Surveillance Camera Project, <http://www.nyclu.org/surveillance.html>, and the Surveillance Camera Players, <http://www.notbored.org/the-scp.html>.
- 9 Yahoo's site directory of Manhattan map sites, listed by popularity, can be found at: http://dir.yahoo.com/Regional/U_S_States/New_York/Cities/Manhattan/Travel_and_Transportation/Maps_and_Views/. See also: Erik Baard, "Routes of Least Surveillance," *Wired News*, November 28, 2001, <http://www.wired.com/politics/security/news/2001/11/48664>.
- 10 The majority of surveillance cameras in the U.S. have been installed by individual business and property owners – often in response to insurance company incentives – rather than by government or law-enforcement agencies. This market-driven deployment differs significantly from the experience of cities like London, where police have deployed surveillance networks that blanket the city and legislators have devised policy governing their use (it should be mentioned that even in London, the police apparently control a minority of the CCTV cameras monitoring public space).
- 11 K. Moy, "Police Eye Videotape, But Where Exactly?," *Boston Globe*, 5 December 2004.
- 12 J. Pelletier, "Cameras Split Chinatown," *The Daily Free Press*, 13 December 2004.
- 13 Denis Wood, *The Power of Maps*, (New York: Guildford Press, 1992); Mark Monmonier and H.J. de Blij, *How to Lie With Maps* (2nd Ed.), (Chicago: University of Chicago Press, 1996).

