Maps and Protest

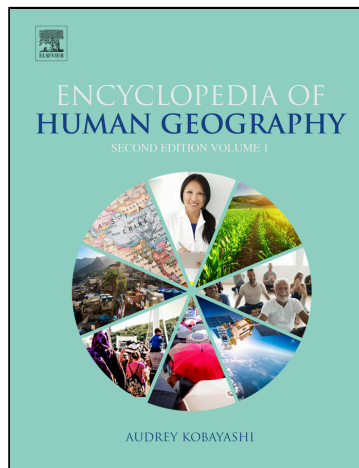Martine Drozdz

Martine Drozdz

LATTS, Université Paris-Est, Marne-la-Vallée, France
6-8 Avenue Blaise Pascal, Cité Descartes, 77455 Marne-la-Vallée, Cedex 2, France

martine.drozdz[at]enpc.fr

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Martine Drozdz , Technologies, Territories and Societies Laboratory, CNRS, Paris, France

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Glossary

Agenda List of public problems or conditions that produces needs or dissatisfaction among people and for which relief is sought through governmental action.

Activism Aggressive action taken for political or social purposes.

Dissent Disagreement with prevailing ideas or forces.

Emancipatory practice Action that can challenge human oppression and transform existing hierarchies of power.

Hegemony Domination of one group or person or ideas over others.

Protest Similar to activism, specific actions taken to counter prevailing political or social forces.

Scale jumping Process whereby political claims and power established at one geographical scale are extended to another.

Social movement Networks of informal interactions between a plurality of individuals, groups, and/or organizations, engaged in political or cultural conflicts, on the basis of shared collective identities.

There are three broad types of maps that can be related to protest activities—maps of protest that locate the site of rallies and demonstrations, maps to protest that are agenda-driven either because they challenge existing representations or they make problems in governance visible, and maps for protests that enable and promote alternative uses of space. The above-outlined categories, which are distinct in their political and scientific goals, are not mutually exclusive, and a single map may combine several of those features.

The Political Power of Maps

Maps bear a close connection to the expression of dissent because they are a powerful medium that can move the needle in political action. They are not neutral scientific documents. They help to shape a worldview that carries its own selective bias. Even when map authors claim to produce accurate depictions, what data and relationships they choose to model has the effect of framing the narrative. A map may construct "a discourse," which a French philosopher Michel Foucault defined as a way of not only displaying spatial information but organizing geographical knowledge that structures a collective understanding of a situation. As a discourse about the world, a map can make an issue visible or invisible and influence how a problem is addressed. That is where it derives its political power.

Historically, the making of maps of protest or to protest is a rather rare occurrence. Most, if not all, maps have traditionally been made by ruling authorities either to represent the extent of their jurisdiction or manage their constituencies. Like statistical science, cartography has grown with and supported the formation of states and administrative systems. Until recently, the monopoly of the state and large private organizations over making maps had precluded any counter-surveys by private individuals that would require sourcing land data and recording an alternative narrative.

With the spread of new technologies, coupled with the greater availability of geolocation data, it is now possible to collect, model, and share/publish spatial data from outside official cartographic channels and sometimes in contradiction with them. Maps have become powerful tools for challenging the dominant spatial order and its representations. They are now part of the repertoire of social activism along with protests, strike actions, and pamphlets. Now, challenging the dominant spatial order goes well beyond exposing the politics of mapping. More critically, it involves reappropriating the technology of creating maps either to challenge the dominant narratives or to blaze new trails by rethinking space and reinventing spatial policies through collaborative mapping.

Maps of Protest

Maps of protest are made by scientists and activists to account for how social movements and social protests spread and claim space. But it was not until recently that spatial configurations began to receive attention for their explanatory power in conceptualizing social protest. They were largely overshadowed by the study of social factors. Since the 1980s, geographical studies of social movements have demonstrated the relevance of place-based factors in understanding the dynamics of social protest. Some spatial characteristics enable human interactions and drive momentum for protest while others inhibit its expression. Successful political rallies
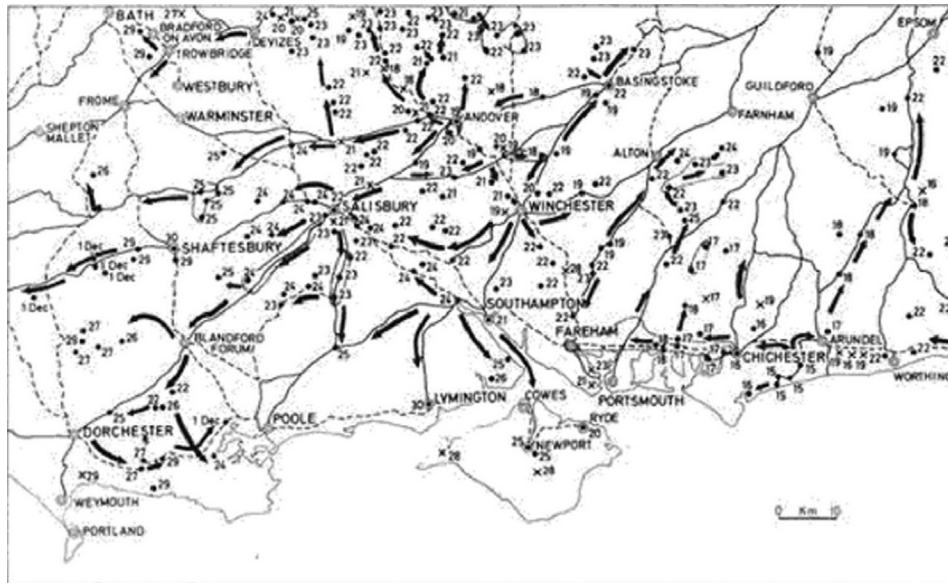

Figure 1 The Waves of Rioting in Central Southern England: November–December 1830. Map reproduced from Charlesworth, A. (ed.) (1983). An Atlas of rural protest in Britain 1548–1900. Philadelphia, PA: University of Pennsylvania Press.

and marches depend on the chosen venue and its geographical characteristics, among which are residential density, segregation levels, the presence of physical obstacles at street level—railroads, rivers, highways, and so on—or lack thereof. And maps of protest help to visualize and model the geographical factors that explain how social movements arise and spread. Media and police sources often provide incomplete evidence of protests or even downplay their size. Therefore, it is not uncommon for activists themselves to make maps of protest in tandem with researchers. Early maps of protest were provided by social historians and geographers. In 1983, Andrew Charlesworth directed *An Atlas of Rural Protest in Rural Britain*. His wide-ranging study surveyed, compiled, and analyzed three and a half centuries of rural riots in England, Scotland, and Wales from 1540 to 1900. It was based on archival records ranging from local newspapers to court proceedings. Charlesworth examined the rise of social movements that attended to the expansion of capitalism in Great Britain while dramatic changes in attitudes toward the environment were afoot. The book contains 75 maps that show how the distribution of protest changed over time, and how particular forms of protest altered as Britain developed from a predominantly feudal to a prominently capitalist society. In studying riots connected with the privatization of land, food shortage, and labor conditions, Charlesworth noted that the geographical spread of the different types of riots can be linked to the introduction of changes to the local economy: land protests were foremost in areas where agrarian capitalism made inroads through land reforms and the adoption of new farming practices. Food riots occurred mostly in industrialized regions while uprisings of agricultural laborers started in regions with the highest unemployment and poverty rates. A comparative map study of the geographical spread of the riots and the expansion of capitalism reveals that the riots were more likely to break out in localities and communities that had been restructured and upset by capitalism (Fig. 1).

Recent studies have adopted a similar mapping approach to lift up dissenting voices that challenge deep transformations to the urban fabric, namely large-scale economic and environmental changes and extensive redevelopment projects. An example of this is the map "Regeneration and its discontents in London," which was drawn in collaboration with local organizations as part of a survey addressing the contentious politics of urban regeneration in London and its (in)visibility in the public sphere. Based on oral testimonies and media analysis, it aimed at aggregating concrete experiences across time and space to understand the emerging patterns of citizens' actions against the transformation of the built environment and some of its salient geographical and social determinants. The resulting map, however, suggests that it is impossible to collect data on every protest movement *in extenso*. With no single archival source being available, the next best thing is to rely on multiple sources, which are by definition incomplete, prone to selective bias and narrative framing. In this instance, the sources used for "Regeneration and its discontents in London" have failed to account for the many actions in protest against the privatization of council housing in East London. While standoffs between residents and authorities have occurred in any of the 32 London boroughs, media attention has nearly exclusively focused on the central boroughs because that is where the iconic city landmarks and the highest-profile development projects are located. As with any map, it is essential to approach maps of protest with an informed critical understanding and view them in light of the sources involved in their making. Maps of protest, and especially those solely based on media sources, may not fully represent the spatial extent of protest, most of which is largely overshadowed in the mainstream media (Fig. 2).
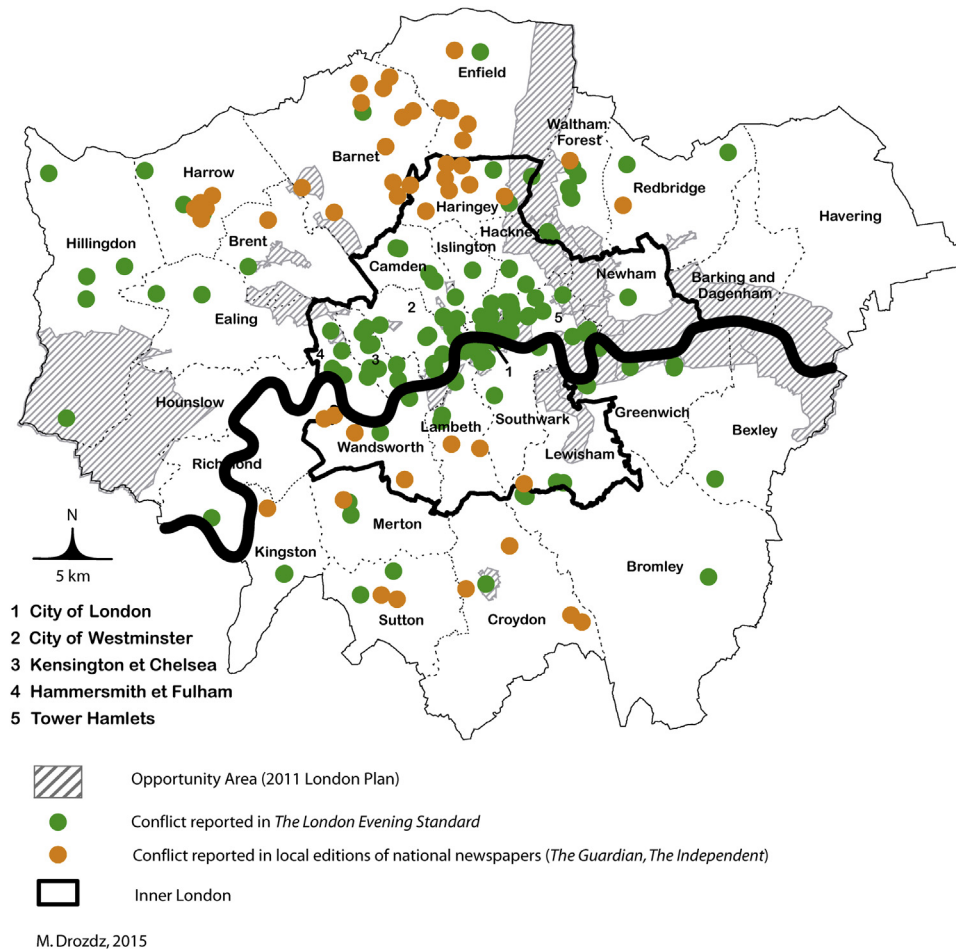
Figure 2 Regeneration and its discontents in London. Map produced by Martine Drozdz in 2014 in collaboration with the London collective Just Space.

Some protest movements have taken mapping into their own hands in a bid to reclaim visibility. The California-based collective Anti-Eviction Mapping Project (AEMP) started to document sites of resistance and protest against real estate speculation across metropolitan areas. Its goals are threefold: data collection, data visualization, and data analysis. Another stated mission of AEMP is to record the narratives of dispossessed communities and involved activists. The project aims at mapping sites of resistance against speculative real estate and venture capital, while remembering collective struggles and losses. The dominant rhetoric about the tech boom in the San Francisco Bay Area makes it difficult to speak up about the negative impact of digital giants. To address that gap, the volunteers from AEMP have been recording and disseminating the oral narratives of those who have been adversely affected by the digital boom and in particular those who have been pushed out of the housing market. Since 2014, AEMP has saved the oral history of those voiceless individuals. Their interactive map, "Narratives of Displacement and Resistance" visualizes the locations of evictions and includes embedded links to the oral testimonies of the evicted and the activists. AEMP has thus been able to document and geolocalize dozens of antieviction protests, and it has helped to provide a detailed mapping survey of both the gentrification process and the activism against it in the counties of San Francisco and Alameda. Not only does mapping protest serve scientific and heuristic purposes, but it also helps to build up an archive of protest action. Their map, which juxtaposes the eviction sites and the places from which the evicted now share their stories, gives a sense of the human toll of gentrification as well as the powerlessness of those who fight it. More than a tribute to the evicted, the map gives a voice to the people left behind by Silicon Valley's much touted success and balances out a narrative written by the victors which leaves out the human impact of urban change (Fig. 3).

Another use of self-made maps of protest is that they also help to "jump scale" in the process of modeling protest in space. When local protests are jointly visualized in one single map, they are no longer only viewed as isolated pockets of activism. "JustMap," an "ongoing collaborative map of London community resources, campaigns, and projects," is an illustration of how mapping allows ascending to higher levels of generality. The map, available online, combines data directly provided by activists, especially those who are involved against the privatization of council housing, the forced displacement of local residents, and austerity cuts in public services in London. While "JustMap" makes no claims to scientific exhaustiveness, it aggregates the data collected during workshops held in working-class neighborhoods. Its goal is not only to create a map of protest to evidence the levels of dissent and opposition to political and economic changes in London. Alongside the current sites of protest and resistance, the map also tags the locations

Figure 3   Narratives of Displacement and Resistance. Map produced by The Anti-Eviction Mapping Project, using © Stamen Design tiles and © CARTO services, available at http://antievictionmappingproject.net/narratives.html. Map data produced by © OpenStreetMap contributors and available from https://www.openstreetmap.org.

that provide support and resources for activists and residents to get informed and involved. Each location is flagged with a status ranging from "going" through "under threat" and "reclaimed" to "lost". "JustMap" makes it possible for site-specific protesters to share knowledge, network, and connect with potential allies. The map itself brings together local experiences whose common denominator is to face the same global changes, and it enables individual protesters to identify themselves as part of a broader metropolitan-wide resistance movement (Fig. 4).

Figure 4   JustMap. Map produced by Nicolas Fonty in collaboration with the collectives Just Space and Reclaim our Spaces, using © Stamen Design tiles and © CARTO services available at http://justplace-london.blogspot.com/. Map data produced by © OpenStreetMap contributors and available from https://www.openstreetmap.org.

Figure 5   The Environmental Justice Atlas. Map based on data provided by EJAtlas contributors using © Esri tiles and © Leaflet services available at https://ejatlas.org/.

Maps for Protest

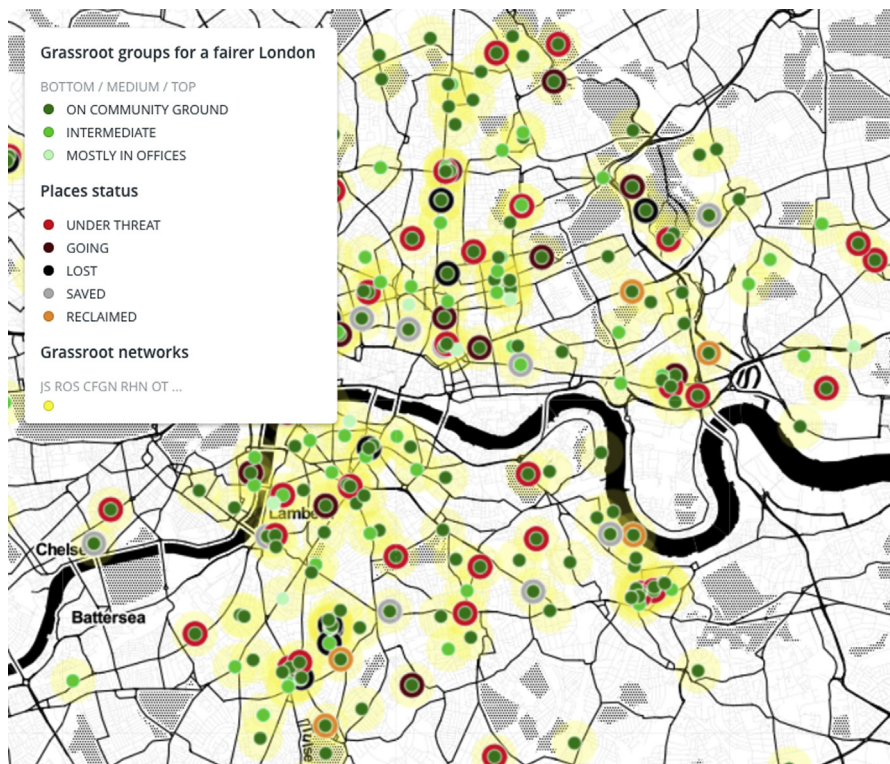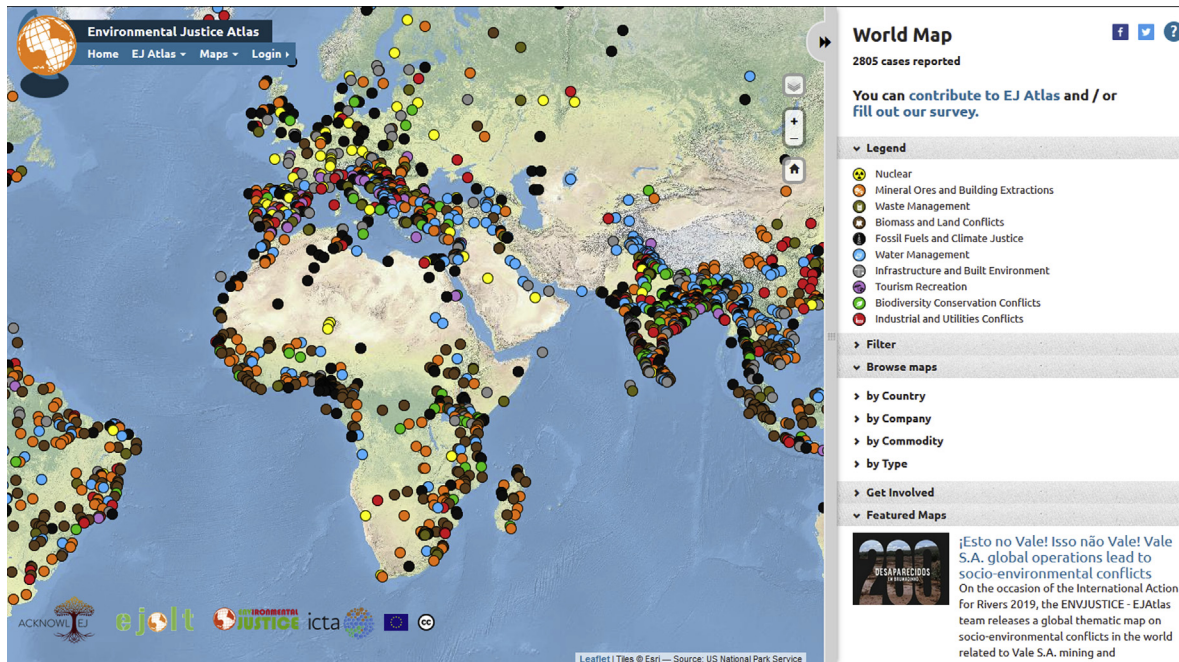Maps for protest can be broadly divided into two main groups—maps that seek to challenge the official framing of a governance issue and maps that seek to expose unlawful actions. They both fall along a continuum of dissent that can be more or less open and embattled, and there is sometimes a fine line between the two. Exposing decisions and actions as morally and legally reprehensible may lead to firmly putting hitherto overlooked issues on the political agenda.

First, it should be noted that the advances in digital technologies have provided administrations—and citizens—with a wide variety of communication tools to exchange georeferenced data with ease. Maps based on direct user input are defined as contributive or collaborative. One such platform is FixMyStreet which allows citizens to report problems to local authorities. Its design philosophy is more strongly influenced by civic complaints than any of the confrontational tactics that we have come to equate with protest. Users may submit reports to their local authorities and notify them about road and public equipment maintenance problems through the dedicated platform. Citizen-driven input can thus help to prioritize and fine-tune the process of fixing common street problems. Many local government bodies which have adopted the use of collaborative mapping are now using the "nuisance map" based on direct citizen input to deliver improved local services. In the United Kingdom, FixMyStreet is contributing to the reshaping of the relationship between service providers and communities; however, the communities with the highest reporting rate are not necessarily those with the most pressing needs. While complaint platforms based on georeferencing empower citizens with direct access to local authorities and help to democratize hyperlocal governance, overreliance on them may also exacerbate spatial inequalities.

It has been shown that collaborative maps act as direct channels for citizens' grievances to reach local government bodies. But they can also be powerful vehicles to reach a global media audience. One such collaborative map, which might be termed "advocacy maps," is the *Global Atlas of Environmental Justice* by the EJAtlas group. Created in 2012 by a collective of academics at the Universitat Autonoma de Barcelona, it maps social conflict around environmental issues. The EJAtlas is based on a collaborative database which collects information directly from the activists involved in environmental conflicts on the ground. It documents and aggregates conflicts across a wide range of topics, like environmental degradation and depletion, soil and water contamination, land grabbing, and the concomitant forced evictions and violent relocations. The data sets are made available online to the public under an open-source license. In 2017, the EJAtlas listed 2100 environmental conflicts across the globe, and in each case, compiled data about the involved advocacy groups, activists, and scholars, the conflict background, the impacts, the claims, and outcomes for the stakeholders. The whole project supports community-led science as it also caters to the needs of scientists, journalists, and teachers for research data directly provided by activists. For instance, the EJAtlas data have been used to investigate the forms and networks of environmental activism or survey global opposition to fracking. Also, the collaborative maps from the EJAtlas provide a fine example of what critical mapping can do to reframe the dominant cartographic narrative. Generally, maps present a view of the environment as a space dotted with strategic resources, which implies that their management and exploitation are the main focus of land use policies. But the maps from the EJAtlas have shifted the focus from what economic potential the environment holds to the consequences resulting from its exploitation. By putting conflict front and center and restoring the antagonistic dimension of resource control and management, they open up new avenues for research in the field of power dynamics and inequalities created by environmental conflicts (Fig. 5).
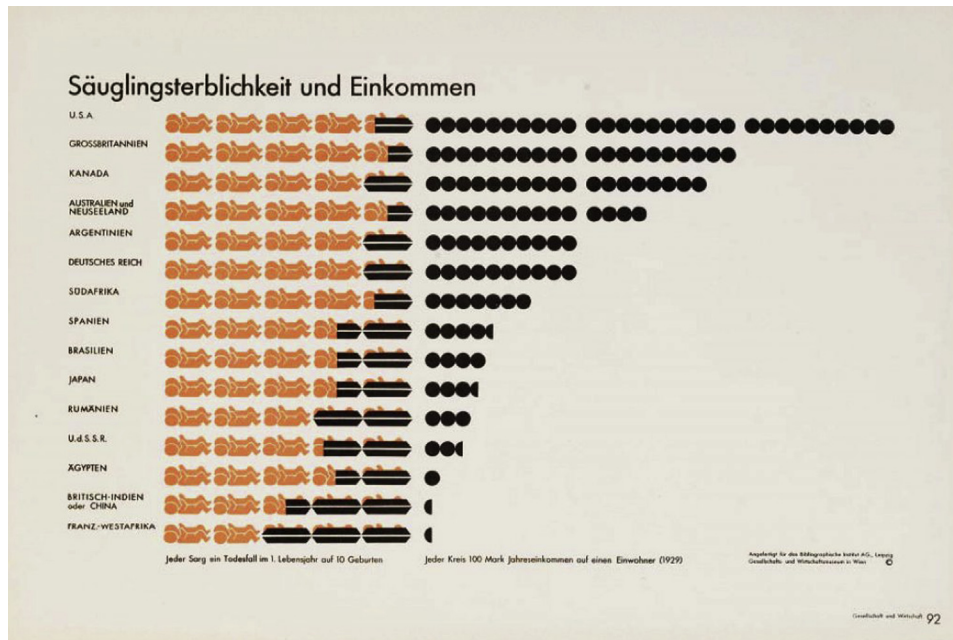
Figure 6 "Infant mortality and income," example of Isotype produced by Otto Neurath in *Elementarwerk*, illustration 92. Courtesy Nephtys Zwer.

What the critical maps from the EJAtlas also demonstrate is that land use should not be simply viewed as a matter of management but also one of policy and politics. That is why the EJAtlas was designed with citizens and elected representatives in mind. Its underlying premise is that people can discover, discuss, and implement alternative policy choices. At the far end of the protest spectrum, there are maps that defy state sovereignty and openly challenge the state monopoly on representing and transforming space. Two emblematic figures particularly stand out in the history of maps to protest. One of them is Otto Neurath, an Austrian political economist in Vienna who devised a system of statistical graphics in the 1920s to support his radical views on economic planning. He created Isotypes (International System Of TYpographic Picture Education) to visualize and compare statistical data in time and space. As a fervent Marxist, he did so with the express intent of advancing class struggle and freeing the people from bourgeois influence. Neurath identified the key role played by statistics in the increasingly financialized and globalized world created by the market economy in the early 20th Century, and he contended that the use of statistics—which had been exclusive to the ruling class—must be reclaimed by the working class. His Isotypes thus help to convey sometimes complex numerical data in a picture language and produce maps that reveal the egregious injustices faced by some victimized groups, such as workers living with health problems caused by industrial pollution or colonized peoples caught in a debt trap created by western nations. Neurath's maps were as many indicting arguments against the economic status quo. He tirelessly traced the deep roots of socio-economic inequalities and made them understandable through mapping. His role in the counter-cartography of colonization cannot be overstated; while colonial mapping in the early 20th Century confined itself to showing the extent of colonial possessions, Neurath mapped the financial transfers between the colonizers and the colonized. He famously included the volume of long-term credits owed to colonizing powers in a map that he presented to the World Economic Congress in 1931, "The Networks of International Finance." The map highlighted the massive exportation of financial services to colonized territories in Asia, Africa, and Latin America and gave incriminating evidence of how European nations pushed them into financial vassalage (Figs. 6 and 7).

Another landmark example in the history of maps to protest is the body of research produced by William Bunge and Gwendolyn Warren and the Detroit Geographical Expedition and Institute (DGEI), and more particularly their studies published in *Fitzgerald: Geography of a Revolution* (1971) which explored the possibility of a critical mapping of public policies. Bunge's maps may be categorized as what Alexis Bhagat and Lize Mogel, the editors of *An Atlas of Radical Cartography*, identify as radical cartography. It encompasses militant mapping practices that subvert commonly held representations and promote effective social change. For two consecutive years, the DGEI provided the people of Detroit with free courses in geography, cartography, and urban planning with the sponsorship of Michigan State and Wayne State Universities. During one of these sessions, the participants decided to rename a police report visualizing child death statistics from *Citywide Pattern of Children's Pedestrian Deaths and Injuries by Automobiles* into *Where Commuters Run Over Black Children on the Pointes-Downtown Track*. Unlike with other alternative mapping practices, it is not so much the collected data that are directly challenged as the ways in which they are framed. Renaming a map means making a statement about the failure of urban policies to address the social consequences of white flight toward the suburbs. The data visualized on the map may be unchanged, but the substitution of commuters for automobiles and the identification of pedestrian deaths as black children wholly alter the perception and understanding of the evidence provided by maps (Fig. 8).

What was a clinical report of traffic accidents has thus been reframed as the grim chronicle of a racial infanticide. Gwendolyn Warren wrote about the difference in a side article with the maps:
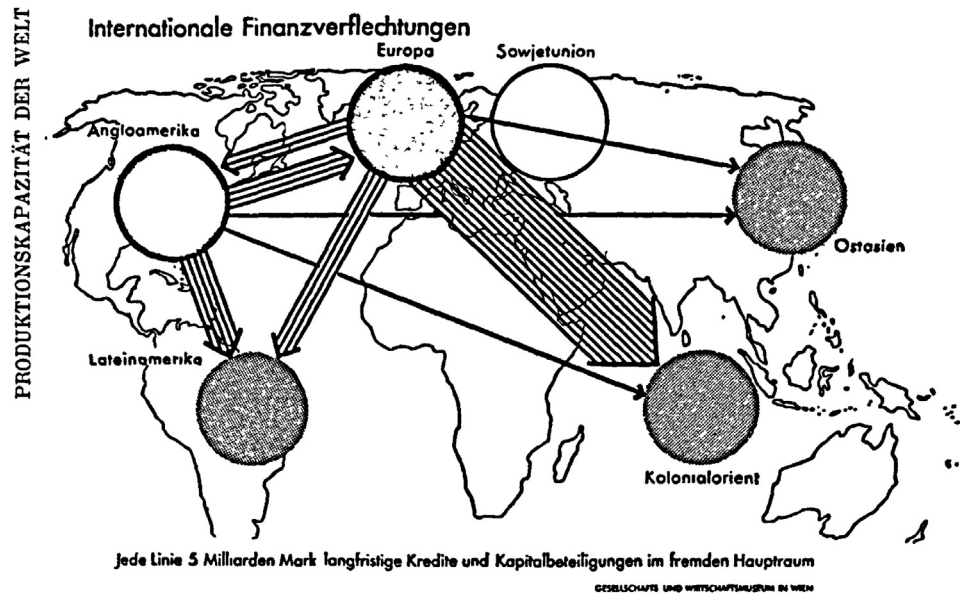
Figure 7 The Networks of International Finance, map by Otto Neurath presented in 1931 at the World Social Economic Planning Congress in Amsterdam. Courtesy Nepthys Zwer.
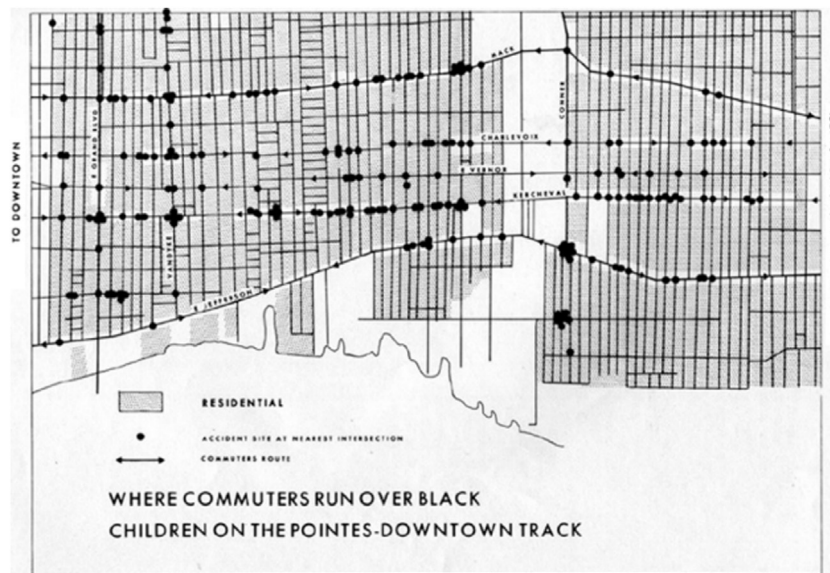

Figure 8 William Bunge: Where commuters run over black children on the Pointes-Downtown track. From The Detroit Geographical Expedition and Institute, Field Notes: Discussion Paper No. 3: The Geography of the Children of Detroit, Detroit, Michigan, 1971.

The way the city is situated, there is the central place downtown and then there are rings which go outside of that and the big ring right outside downtown Detroit is the Black community. All the area about a mile going out from downtown Detroit is one-way traffic and runs right through the heart of the Black community. And on one specific corner in 6 months there were six children killed by commuter traffic. But, naturally, these deaths of the children or the injuries or whatever it happened to be were disguised as something else. They never said that a certain business man who was working for Burroughs downtown who was on his way to Southfield went through the Black community by way of this commuter traffic and killed my people – Black children. Even in the information which the police keep, we couldn't get that information. We had to use political people in order to use them as a means of getting information from the police department in order to find out exactly what time, where, and how, and who killed that child. The fact that it actually establishes a pattern proves it is not 'accidental'. (Detroit Geographical Fieldnotes III).

Both Otto Neurath's and William Bunge's experiments in critical cartography still play an influential role in the field of (investigative) journalism. The work of Philippe Rekacewicz, who was the chief cartographer at the political magazine *Le Monde Diplomatique*, is proof of that lasting dual influence. His *Geopolitical Atlas of Le Monde Diplomatique*, which includes the map entitled "The Noria of Pillage," provides a contemporary illustration of maps to protest seeking to expose hegemonic forces, such as those which
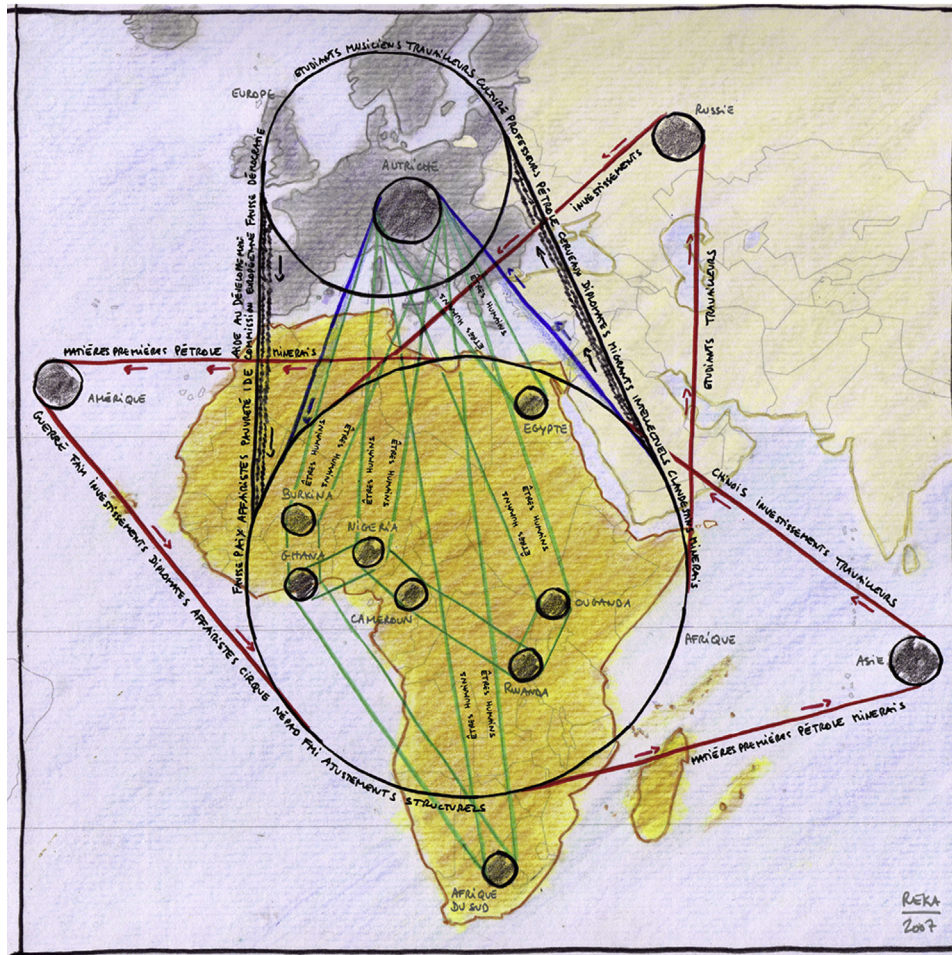
Figure 9   La Noria du Pillage. Map produced by Philippe Rekacewicz.

have been keeping Africa under their thumb through structural adjustment programs and unequal trade relations. Other similar maps to protest can be found on the blog VisionCarto which keeps an updated list of historical and contemporary examples of counter-cartography (Fig. 9).

The latest advances in data visualization and mapping services have expanded the realm of possibilities for producers of maps to protest. They now have the ability to circumvent state and media censorship and reach out to the citizenry without any intermediaries. Take for instance "The Blood-Stained Housing Map" (link), a collaborative map created in October 2010 by an anonymous Internet user to document the violent evictions induced by development projects in China. The ambitious goal set for the map is to reveal the full extent of the land grabs and evictions and elicit/provoke a national and international response that rises above the emotional stir caused by individual cases. The project which started out as a blog runs on Google's mapping tool Google Maps and uses a wiki-based platform which allows online communities to collect, publish, verify, and discuss their data. The project founder was driven by the desire to provide the public with an archival database of violent evictions and jumpstart a civic response from Chinese real estate buyers who are called upon to boycott development projects built on unethical practices.

The "Blood-Stained Housing Map" can therefore be included in the corpus of maps to protest that expose and condemn state violence and the violation of human rights, be they collaborative or based on a forensic exploration of massive sets of documents and data. To name but a few contemporary examples of data-driven maps to protest that have garnered a lot of media attention, we can mention the mapping of the Iraq and Afghanistan war logs from WikiLeaks data or the mapping of the CIA's secret detention facilities, made by critical legal scholars after Freedom of Information requests.

Emancipatory Mapping practices

The last set of protest maps can be defined by more than their agenda of critiquing and criticizing official maps. These maps directly advocate emancipation from the already established spatial order by leveraging the media tactically, hijacking existing spatial data,
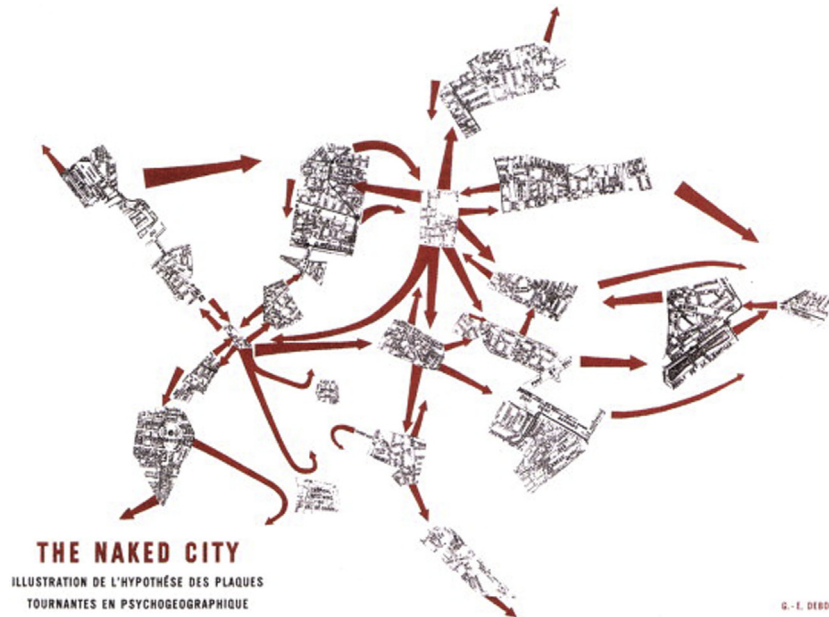
THE NAKED CITY
ILLUSTRATION DE L'HYPOTHÉSE DES PLAQUES
TOURNANTES EN PSYCHOGEOGRAPHIQUE

G.- E. DEBORD

Figure 10   The Naked City: A Hypothetical Illustration of the Psychogeographic Battle between Places. By Guy Debord and Asger Jorn, Permild & Rosengreen, Copenhagen, 1957.

or engaging in counter-cartography practices. Individuals and collectives can use them to emancipate themselves from the power structures that rule their territories and the power structure that is space itself.

The Situationist International in the 1960s offered the intellectual playground that allowed the earliest instances of maps for protest to emerge. Psychogeographical cartography may well have been the first disruptive actualization of mapping for the sake of spatial emancipation in a ludic mode. In the 1950s, the situationists, who were a group of avant-garde artists formed around the prominent French sociologist Henri Lefebvre, developed a radical critique of modern urbanism. They held it responsible for producing a regimented urban life and pandering to the needs of the consumer society and the commodification of existence. The situationists argued that the urban landscape suppressed the geographical imagination and experience by imposing grand(iose) architectural complexes on urban residents. To break free from their domination, situationists organized "drifting" sessions or improvised wanderings through urban spaces. The drifts were then recorded in psychogeographical maps which represented unitary ambiences and atmospheres in fragmentary forms in defiance of any normative mapping conventions. Again, the situationists contended that such norms held back the human imagination. The psychogeographical maps, "The Naked City: A Hypothetical Illustration of the Psychogeographic Battle between Places" and "Psychogeographic Guide to Paris" illustrate how they made particular use of collage to challenge and hijack mapping conventions. Cutouts from a map of Paris were laid out against a white background and connected by arrows to mark junction and transfer points, which the situationists termed "slopes." This process resulted in uncontoured mock-maps highlighting a few choice sites clipped from existing maps. With their ludic open-form cartographic expression, the situationists demonstrated how, like writing, the making of maps can support the reappropriation of disparate experiences to unmoor the human imagination and reclaim cultural and political agency/autonomy (Fig. 10).

Contemporary versions of drifts and hijacked maps have supported an even more militant and radical rhetoric. In 2010, to oppose the overreaching surveillance of urban spaces, the anonymous artist collective The Institute for Applied Autonomy (IAA) developed a computer program that charted itineraries through global cities along the urban routes least subjected to CCTV surveillance. Named i-See, the piece of software generates maps containing user-generated data including positioning of surveillance cameras in several international city centers. Before the i-See project, the IAA had collaborated with the artist Steve Rowell on a map called "SITE-R" which located street surveillance cameras in Manhattan. The collective described its approach as "tactical," concerned with disruptions within existing systems of power and control. For them, Tactical cartography refers to the creation, distribution, and use of spatial data to intervene in systems of control and challenge existing power relations (Fig. 11).

With the development of social media, it is not uncommon for spatial data to be aggregated and broadcast in real-time during protest events. The maps that circulate over social media play an essential role in democratizing public spaces. They help to locate a protest march or a rally and send alerts to evade police repression. They are instrumental in claiming and occupying physical space to voice discontent and protest, which is a core trait of a healthy democratic process. Indeed, a successful rally and its subsequent morphing into a social movement largely depend on its ability to occupy space. In parallel, the forms of spatial policing and the management of protest behavior by law enforcement are direct expressions of the authoritarian or liberal character of the state. Law enforcement and protesters face off in a conflict over the control of public spaces and their access points. It is therefore of key strategic importance to produce and communicate geolocalized information to increase protest participation and provide escape routes
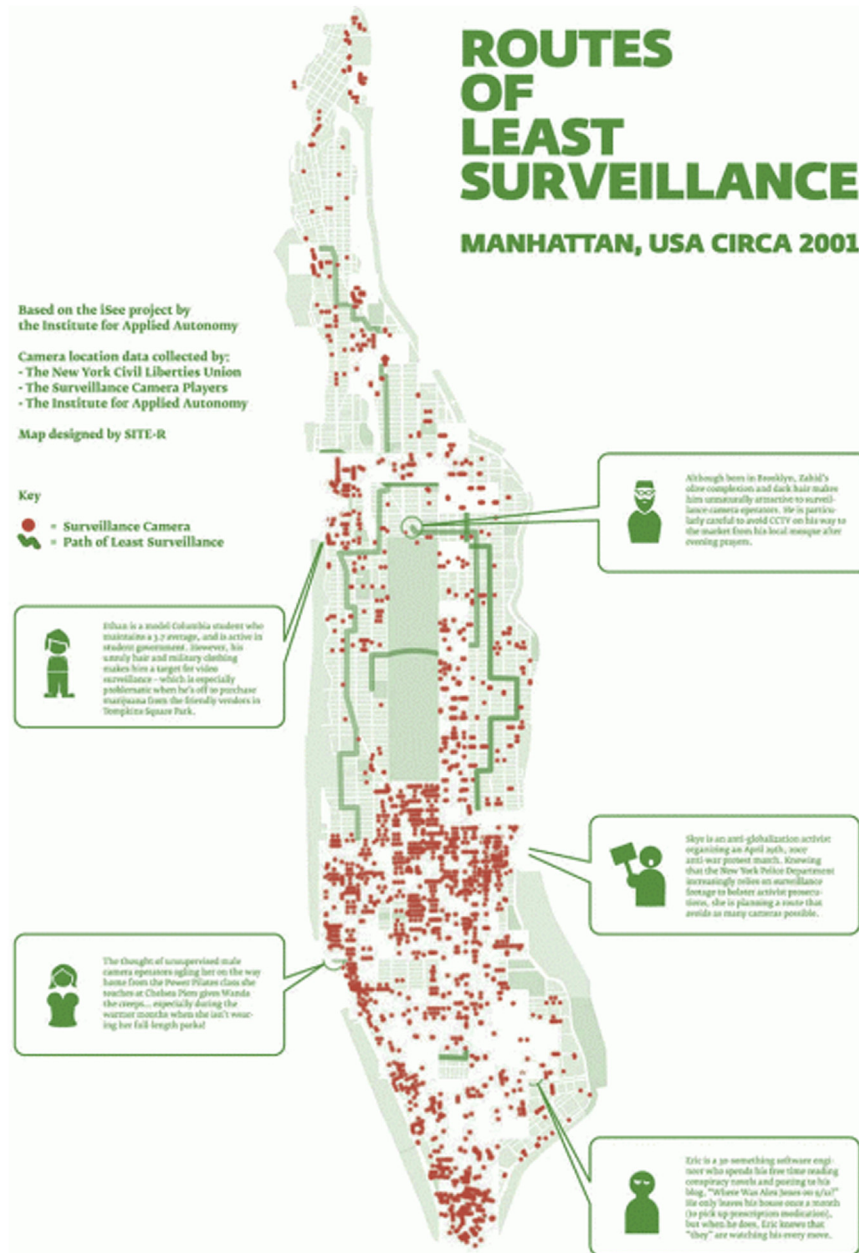
Figure 11   Routes of least surveillance, Manhattan, USA Circa 2001. Map created by Steve Rowell in collaboration with the Institute for Applied Autonomy.

from police repression. The weaponization of maps for protest has been described by some as "maptivism," which is a portmanteau coined from the combination of "map" and "activism."

One notable example of real-time mapping of protest as a tactic includes the now defunct mobile app Sukey, designed to facilitate demonstrators' mobility during the 2010 student protests against top-up fees in the United Kingdom. The protesters who rallied against the government's austerity policies and the rise in university tuition fees were routinely kettled. Kettling is a tactic used for policing public spaces which involves the formation of large cordons of police officers who then move to contain a crowd within a limited area. In theory, it would have been effective in stymieing and shutting down the student protests. But in addition to providing the locations of rally points and planned pickets, Sukey also crowdsourced reports of police locations updated in real-time. Protestors using the map could skirt around police, so there were never enough demonstrators in one place to kettle. There have been other similar maps for protest used in recent social movements during the Arab Spring or the various Occupy movements like the Indignados in Spain, Occupy in the United States, or Nuit Debout in France. In Turkey, for instance, when Taksim Square in Istanbul was occupied by protesters in 2013, the "Istanbul Police Movement map" allowed them to maintain control of the Square and stand their ground in their standoff with the police. The map showed the locations of the insurgent barricades used to guard

protesters from the police around the Square, the names of the protesting groups, and information on blocked roads. Cartography has long been the preserve of coercive state control and strengthened its grip on space. What those examples demonstrate is that it is possible to use cartography tactically to reclaim space in an act of political resistance.

Maps for protest have recently become strategic media in struggles for control over public space. But they were formerly and are still used as powerful vehicles for territorial claims in postcolonial conflicts. While the development of cartography has been inextricably linked with colonial history, its users now include autochthonous peoples who back up their territorial claims with geographical evidence. By Indigenous we refer to minority communities whose presence historically predates the formation of modern states (Native Americans, Maoris, Aboriginal people to name but a few). The maps made by autochthonous organizations or communities are often used to support claims in property rights disputes, negotiate land protection directives, or oppose industrial development. To support their cases, autochthonous peoples must produce evidence of their continuous historical presence and argue for a spiritual and economic relationship to their ancestral lands. The use of maps for postcolonial conflict resolution first originated in Canada in the 1960s, and with the development of digital cartography, it started to spread to other parts of the world in the 1990s. It has since helped autochthonous communities to successfully seek compensation from corporations and states, gain recognition of land rights, and settle disputes over land use and control of natural resources. In some cases, it has led to the creation of autonomous territories like Nunavut. But there is a further stage in the decolonization process which leads to challenging cartographic representations in themselves and decolonizing knowledge and categorizations with innovative frames of reference. Sensitive mapping, non-Cartesian representations, non-Eurocentric projections are as many alternative ways of engaging space and positioning oneself outside a western scientific framework. *The Decolonial Atlas*, an online collection of postcolonial maps, includes many examples of alternative cartographic representations decentering the colonial perception and representation of space. Among them are maps of protests (500 Years of Black Resistance), maps to protest (Dakota Access Pipeline Indigenous Protest Map), and alternative map projections (the AuthaGraph projection). The Decolonial Atlas perfectly illustrates the multifaceted relationship between maps and protest, and as such it stands at the confluence of insurgent cartographies, maps of protest and maps for protest, where maps contribute to political and cultural empowerment.

In sum, it is not impossible to define a set of core attributes of protest maps despite the sheer diversity of their uses and intents. Ranging from memorial self-cartographies to advocacy cartography, maptivism and postcolonial mapping, they all demonstrate the importance of harnessing cartographic technologies and online media as a prerequisite to the emergence of alternative mapping strategies. These alternatives are made possible with the availability of community-based cartographic tools. Allowing for the production of maps other than for the sole purpose of propping up power structures, they turned maps into potent instruments of political self-awareness and efficacy.

See Also: Action Research, Participatory; Countermapping; Critical Cartography; Environmental Justice; Governmentality; Hegemony; Indigenous Geographies; Indigenous Knowledge; Land Rights; Maps and Governance; Maps and the State; Neocolonialism; Organizations, Nongovernmental; Radical Geography; Resistance; Resource and Environmental Economics; State; Territory and Territoriality; Transnationalism.

Further Reading

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Relevant websites

Vision Carto https://visionscarto.net/. VisionCarto is a multilingual and multimedia online platform that publishes collections of counter-cartographies, critical maps and essays. It contains several essays on the work of early critical cartographers such as Otto Neurath and William Bunge along with contemporary work by Philippe Rekacewicz. It is maintained by Philippe Rekacewicz and Philippe Rivière.

Not an Atlas https://notanatlas.org/. NotAnAtlas is the online companion to the book *This is Not An Atlas* published by the collective Orangotango+. The book contains more than 40 examples of critical and radical cartographies and counter-mapping experiments. The online resource contains both a reproduction of the maps and the texts contained in the book and provides further examples of contemporary protest maps. All the mapworks are published under the Creative Commons Attribution 4.0 license that allows their free circulation and reproduction.

The Decolonial Atlas https://decolonialatlas.wordpress.com/. The Decolonial Atlas is a online collection of maps that challenge dominant cartographic representations and offer examples of indigenous cartography used in protest over land and natural resources. It is a volunteer-run project and most of the mapworks are published under Decolonial Media License 0.1.

The Counter Maps Collection http://countermapcollection.org/. The Counter Maps Collection is an online collection and essays edited by Dee Morris and Stephen Voyce. It contains several examples of critical and radical mapping.

FixMyStreet https://www.fixmystreet.com/.

The Blood-Stained Housing Map (link) : https://www.google.com/maps/d/viewer?brcurrent=3%2C0x31508e64e5c642c1%3A0x951daa7c349f366f%2C0%3B5%2C0%2C0&ie=UTF8&hl=zh-CN&msa=0&ll=32.5838496071762%2C118.36669971874994&spn=25.282473%2C36.035156&z=7&mid=1klx4UyvWhhkPOuD3ZALbS3vpNXo.

The Detroit Geographical Expedition and Institute Then and Now. Antipode Foundation Symposium on the DGEI with six commentaries published in 2017, and links to the original DGEI Field notes, comprising *Field Notes No.1: The Detroit Geographical Expedition* (1969); *Field Notes No.2: School Decentralization* (1970); *Field Notes No.3: The Geography of the Children of Detroit* (1971); and *Field Notes No.4: The Trumbull Community* (1972). Link.