



## ***7. Hacking Administration—A Report From Los Angeles***

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In 2012 the City of Los Angeles began an alliance with a burgeoning civic hack scene. In this context the term “civic hacking” remains the umbrella moniker for a series of informal meet-ups and weekend-long events organized around software demos, conversations, and power-point presentations that all pose technology as a balm for civic and administrative problems. More broadly in the United States, civic hacking has prospered in several cities since Obama took office and oversaw the launch of Data.gov, a website where federal agencies publish datasets for free reuse by the public. Yet both the term and the form draw from several broader traditions: geek culture, for which hackers are deft manipulators of computer software and hardware; open source software culture, with its dedication to clever code, free speech and open licenses; and Silicon Valley, where frenzied, time-limited, overnight hackathons became a cheap means to rapid prototyping and recruiting young talent. *Civic* hacking—drawing more from these traditions than negative, shadowy depictions of hackers rooting out security breaches—captures a trend to harness the craft, ingenuity, and aesthetics of these variably outsider or industry traditions by fiscally and design-challenged governments. Says a “civic designer” in a blog post for the non-profit Code for America’s website, “What began as a niche theory about the potential to improve government using technology has quickly expanded to focus more on changing the culture of government to work more effectively and creatively with its citizens.” (Levitas, 2013)

This chapter analyzes civic hacking in the context of the City of Los Angeles. I make the case that civic hacking primarily offers an instrumental model of participation that engages at the level of administration. The rhetoric about civic hacking blurs citizens with experts, describes a more direct

and collaborative participation, often emphasizes technological practice over debate, and is usually engaged with designing city services rather than policy or lawmaking. To analyze this kind of participation in practice, I examine civic hacking through political theories about participation in the administrative realm of government. This analysis allows me to make distinctions between types of civic hacking projects that are too often glossed over in the academic literature on the topic, particularly that between instrumental versus monitory or agonistic forms. To make these arguments, this chapter presents material from a four-year participant observation study, as well as from interviews conducted with citizens, city staff, hackathon event organizers, participants, and sponsors.

This chapter begins by defining civic hacking, then describes the civic hacking events that took place between 2013 and 2016 in Los Angeles. I next examine literature that has been critical of civic hacking to argue that many of these analyses fall short; civic hacking is an emerging phenomenon that continues to evolve and defy the claims made about it. Finally, I offer a theoretical analysis to make distinctions among civic hacking projects' goals. I draw from political theories about participation in the administrative realm of government to make the case for more monitory and agonistic forms of civic hacking that are aware of the values of the technologies being used.

### ***What Is Civic Hacking?***

Civic hacking is a type of political and civic participation through hands-on making of digital products and user-friendly design, usually by forming groups to create websites or phone apps. For example, the first White House Open Data Day Hackathon in 2013 asked participants to build web software for a new White House citizen petitioning system; at the National Day of Civic Hacking that same year, the EPA asked participants to make visualizations with data on watershed pollution. The Open Knowledge Foundation, a non-profit dedicated to information sharing, makes the claim that civic hacking, in this regard, allows citizens to participate more directly in creating the tools of government: "This is more than transparency: it's about making a full 'read/write' society, not just about knowing what is happening in the process of governance but being able to contribute to it."<sup>1</sup> Yet while civic hackathons are oriented around tangible, technical products, they also create spaces of communal making that reflects the production and performance of civic desires and critiques. This aspirational place making is one key outcome of these events, not necessarily any one design product.

## ***Civic Hacking in LA***

In Los Angeles, civic hacking has taken three main forms: first, as large-scale events that attract hundreds of people and often have the structure of a prize competition; second, as one-off events that typically focus on a single issue of community concern; and third, as smaller, intimate meetups that take place weekly or monthly. The large-scale events often coincide with a National Day of Civic Hacking celebrated in Washington D.C. and by cities around the United States. Such was the case for Los Angeles' first civic hackathon in 2013, a grassroots affair that attracted around 500 people. Over 2014–2017 the City has played a larger role, hosting Hack for LA events in city administrative buildings, while helping with publicity and offering personnel support.

These large-scale events typically take shape as a competition, the form that has characterized civic hacking most vividly in literature and the press. At most Hack for LA events, organizers introduce a common set of rules: one demo per team, made from “fresh” coding that must originate during the event and that must be up and functional during the final presentations. Judges are to base their decisions on originality, a clear and focused concept, and the quality of the technology in use. The rules place an emphasis on collaboration and speed; as one organizer put it, “The hack process itself helps people to quickly problem solve.”<sup>2</sup> Results must contend with the technical constraints of designing working demos within two-day’s time.

These events also have prominent commercial sponsors who donate cash prizes. Sponsors at the December 2013 Hack for LA event, for instance, included Tapdn, a Santa Monica software company that markets to college students; Google; Livestrong, a health and fitness website; ESRI, the GIS company; and Sprint. One of Hack for LA’s primary sponsors has been a non-profit, the i.am.angel Foundation, founded by the singer will.i.am from the Black Eyed Peas. The Foundation, whose mission is to support STEM in low-income neighborhoods in Los Angeles, has lent staff to organize past Hack for LA events. Officials from the City of Los Angeles also make an appearance at these events; while the industry representatives entice participants towards using their software or data, city officials prevail on attendants to draw on city data in their designs.

Civic hacking in Los Angeles also takes a second form as one-off affairs that tend to focus on particular issues. In 2015, for example, the City coordinated #techLA, a cluster of weekend hackathons held throughout the year that urged participants to design projects on the themes of water, transportation, and community. At one of these events, the July 2015 #ImmigrationHack, there were no sponsored prizes, no winners, only suggestions,

“ideations”, and prototypes. Non-profits and government officials talked about the very real material challenges of helping non-citizens find the correct online forms to fill out or the right desk to visit if they want to take the path towards citizenship. The end result application prototypes ranged from a user-friendly website where the undocumented could find essential government documents, to social-media websites that connect new immigrants with the settled population.

Finally, the city’s broader civic hack scene encompasses more frequent meetups of programmers, data scientists, and interested citizens. In 2015 civic hack nights took the shape of monthly Hack for LA gatherings organized by volunteers and the two-person staff from Compiler LA, a Benefit Corporation that designs web apps for governments and non-profits.<sup>3</sup> On its Meetup page, Hack for LA defines itself more specifically as the Los Angeles “Code for America Brigade”, meaning that it enjoys minimal administrative and fiscal support from the San Francisco-based civic tech non-profit Code for America. The 2015 meetups focused less on actual making and more on brainstorming how technology might address a certain issue of concern, such as homelessness and mental health. After a hiatus, beginning in June 2016, the coordinators of the monthly Hack for LA nights began weekly meetups at a space in the downtown arts district. These weekly gatherings have abandoned the social, discussion-based format of the year before and focus primarily on application design. Participants arrive to work in teams on apps and websites over the course of the three-hour meeting. Current projects as of this writing focus on public arts awareness and affordable food.

Civic hacking in Los Angeles should be viewed as a piece of a larger cultural change. One advocate I spoke to mentioned that people have been able to create livelihoods based on the City’s support of civic hacking or civic technology—one example she supplied is Compiler, mentioned above, which has garnered contracts with the City, the County, and local non-profits. Other participants I spoke to told me that the ultimate goal of civic hacking isn’t simply new tools—realized or unrealized—but a change in government culture towards greater transparency and data literacy by staff. Said an organizer of Hack for LA, “A lot of times in these environments we can build something that solves a problem, but even if we create a proof of concept to help officials think critically about opening data or engaging in transparent and participatory way with communities, that’s a victory. We’re trying to win on both of those fronts.”<sup>4</sup>

The phenomenon of civic hacking remains an emerging phenomenon, given its shifting forms over the past three years in Los Angeles alone, making it difficult to theorize or make claims about. In the next section, I go over

three important critiques that have been made about civic hackathons. However insightful these critiques, they too often gloss over distinctions among projects, the hackathon form, and how participants engage in these spaces. I move beyond these critiques, in the final sections, with a normative analysis of civic hacking that makes finer distinctions among civic hacking projects' values and goals.

## ***Critiques of Civic Hacking***

### *Neoliberalism and Silicon Valley*

One critique of civic hacking is the influence on it of Silicon Valley, often visible in the hackathons' form and tactics, in the rhetoric deployed, and the companies explicitly involved as sponsors. According to some critics, civic hackathons are problematic because they borrow from a format exported from start-up culture in an attempt to reproduce some of the values and practices from private enterprise in public administration. This formal and conceptual transfer has been commented on in literature on civic hacking (Goldstein & Dyson, 2013; Irani, 2015; Schrock, n.d.) and by civic hackers themselves. One participant I spoke to described how the city endorses a form borrowed from private industry in order to “catch up” with it: “The city is ... taking advantage of the buzz. I would say the zeitgeist.”<sup>5</sup> Civic hackathons in this way produce particular subjects, creating “entrepreneurial” or “algorithmic citizens” that value efficiency and rapid-fire innovation (Irani, 2015; Schrock, 2016). Civic hackathons therefore encourage opportunistic, depoliticized forms of participation, such as reporting potholes, that are bereft of any impact to addresses relations of power (Morozov, 2013). The resulting institutional collaboration puts civic hackers at odds with the traditional view of hackers as dissidents or activists (Coleman, 2013).

There is also clear evidence that tropes from Silicon Valley, and the related open source software movement, have driven a shift from a discourse that valorizes centralized expertise to today's direct, crowd-sourced problem solving. In this discourse, software features provide metaphors for governance; technologies of the “free and open” become, at least for thinkers such as technologist and publisher Tim O'Reilly, a catch-all solution to collectivize social problems at large—education, publishing, architecture, and now government (Kelty, 2008). Public figures often evoke these cyberlibertarian influences when they adopt O'Reilly's slogans of “gov 2.0” and “government as platform,” a phrase that describes the utility of government APIs that programmers can build software upon. O'Reilly's ideas are repeated at Los Angeles events, as when at one

Hack for LA event Mayor Garcetti cited O'Reilly to explain the government's role now that it offers open data: "We are the platform, you innovate and build on us."<sup>6</sup> The rhetoric of civic hacking therefore describes a direct, collaborative form of participation in government administration that collapses or inverts the distinction between citizens and experts: now it is citizen entrepreneurs who will improve policy or city bureaucracy, through technological innovation and user-friendly design. As critics point out, this rhetoric appears to put the onus of government services on citizens themselves.

Because projects often incorporate commercial software, critics have also expressed concern that civic hackathons will shift the onus of service delivery to the private sector, providing a "backdoor" to government contracts (Johnson & Robinson, 2014). Such partnerships with Silicon Valley—or Silicon Beach, the name donned by a cluster of tech companies in the coastal Los Angeles area—in this way appear to signal another example of neoliberalism as governments attempt to hand over the design and oversight of public information services to participants and private companies. Civic hacking, in this line of critique, therefore becomes another means of harnessing the efficiencies of the private sector by way of citizens who represent the skillset of nimble technology firms.

Civic involvement, as one result, becomes uncomfortably tied with corporate aims. As we have seen, the influence of start-up culture goes beyond rhetoric to incorporate public-private partnerships into the economic structure of these events, particularly in the form of sponsorships by companies that collect and monetize user data. Meanwhile, sponsors offer access to their products' API, acclimating programmers to their product. Sponsorship appears, at least in Los Angeles, endemic to civic hacking spaces; the weekly Hack for LA is sponsored by a consortium of nonprofits and private companies, including LACI and Carbon Five, a software and product design firm.

Among the participants I spoke to, some came to civic hacking events with a feeling of civic duty as much as a desire to "network" and job seek. In these spaces, the civic hacker is cast at once as a civic participant, a consumer, a potential employee, and an unpaid laborer. Indeed, the discursive and design influences from corporate Internet culture are, as mentioned, highly visible at these spaces. Google, ESRI, Intel, offer sponsorships, prize money, and booths where representatives hawk their products. Any analysis of these spaces must confront that the civic hacker has other potential gains beyond civic skills, and that this possibly weakens the civic motive. Furthermore, a general emphasis on the neutrality of data and these technical tools only means that deliberation and debate about the role of the private sector in these civic spaces are often kept at bay.

### *Languishing in the Speculative*

Another critique is the ephemeral nature of many hackathon projects. Rather than full-fledged Deweyian publics that work together to bring political issues into focus, Lodato and DiSalvo (2016) view civic hackers as contingent “pro-to-publics” that simply disband after the event. Their material labor produces prototypes of imagined, better futures, but ultimately remain speculative, with no sustained presence over time. Indeed, lack of sustainability has been a problem for civic hacking in Los Angeles. So far, civic hacking is better seen as a broad diagnostic of civic concerns and frustrations that are worked out through prototypes, or “demos” of possible solutions. These demos most often languish with no financial or institutional support beyond a few days’ hustle of coding and design. Prize awards at civic hackathons do not seem to induce people to continue their projects once the lights are turned off and doors are closed.

In 2015 the City shifted tactics to contend with the ephemeral results of open data events. First, Los Angeles hosted a series of themed, issue-oriented hackathons (*ibid.*) based on concerns dictated by the Mayor’s office: the drought in California, Los Angeles’ ongoing transportation woes, and community engagement, with a particular focus on immigration. At Hack for LA 2015, held in the City’s architecturally sublime Water and Power building, organizers announced data sets specific to those city challenges, including data on parking tickets and water use by zip code. Programmers brainstormed prototypes in the main event space, where a mural of Mulholland towered over participants who were tasked, at this particular event, with “hacking the drought” unsettling California at the time. The city encouraged participants to put their ideas into workable form through an app challenge that was to begin in September of 2015, called Challenge: LA. The Challenge promised funds and support to shepherd projects to realization. However, nothing came of Challenge: LA. According to one of the Mayoral staff, the funding never materialized, and the hackathons simply did not yield results that could move beyond prototypes. The employee explained, for example, that the City already had contracted with a private company to design water-saving information services, making the crowd-sourced approach redundant:

from the water hackathons [hack the drought], what was interesting is people came up with ways to meter water and for individuals to get information on water use. But the Department of Water and Power had set up relationships to do that already. There was not an opportunity to use these ideas.<sup>7</sup>

Is participation through civic hacking ultimately better left in the speculative realm, such that the rhetoric of direct participation or collaboration with the

government should be corrected and toned down? This shift in rhetoric does seem to be occurring. At an event in April 2016, the Mayor's office conceded that the City would spend less time reaching out to citizens and instead redirect their efforts towards more open data sharing across City departments and with private companies such as Google, since these use cases have proved more successful.

### *Confined by Solutionism*

Perhaps the most consistent critique of these events centers on the civic hackathon's vision of governance, specifically its proposal that technological expertise is a way to resolve complex political problems. Lilly Irani (2015) argues that the politics of civic hackathons reside in its form more than the issues addressed: making and experimenting are privileged over debating and planning, and proponents imagine that social change can happen through small technical acts occurring "outside social movements or formal politics" (p. 17). The politics of civic hacking, therefore, are not in the various issues that projects take up, since in any case the hackathon can absorb any issue. Rather, the politics reside in an epistemological assumption about how civic concerns should be addressed. Civic hackathons, under this critique, rely on technological "solutionism," a term coined by Morozov to describe the shallow tendency to define problems narrowly through technological solutions (2013).

Lodato and DiSalvo also analyze civic hackathons in relation to literature on the role that technology and design play in politics, drawing from John Dewey's theories on publics and issue-making and from Noortje Marres' concept of "material participation" (2016). For Dewey, an "issue" is a condition of concern with immediate consequences; "publics" come into being as they cohere around and articulate an issue in the face of ongoing, collective distress. Marres refines these concepts to argue that material devices can play an important role in mediating and structuring publics and their issues; material practice offers another mode of engagement in issue-formation beyond that of discursive deliberation and debate. Civic hackathons, for Lodato and DiSalvo, present an example of material participation; they are sites where attendees give form to the conditions of political issues through tinkering and prototyping. In the authors' final analysis, however, civic hackathons reduce political issues into tractable problems that can be resolved through technical or design solutions. Complex structural issues, such as affordable housing or pollution, masquerade as technical problems that can be solved by phone apps and websites. The authors believe this mode of participation forecloses inquiry and suppresses alternate explanations of such issues beyond



the narrowly technical. Since these events encourage a specific form of civic engagement, the outcomes are portrayed as a naïve view of “politics as the mechanics of government” by reducing political issues into what can be solved with technical skills alone (DiSalvo & Gregg, 2013).

### ***The Problem of Writing About an Emerging Topic***

These three critiques of civic hacking are, like any analysis of a contemporary phenomenon, based on a selection of outcomes so far, even as civic hacking continues to evolve and belie some of the claims made about it. Several critiques (Irani, 2015; Lodato & DiSalvo, 2016) are based on empirical observations of civic hackathon that took the form of a one- or two-day app contest. Yet, not all civic hacking events I attended were contests or had corporate sponsors—the Immigration Hack, for instance, was sponsored by the City and a handful of nonprofits. In fact, some civic hacking events are not based around prizes or product prototyping at all. Several civic hacking events have instead provided forums for informed discussion among participants, nonprofit representatives, and city officials, taking the shape of a more traditional public sphere. Civic hack events have offered a space where citizens can gain a better understanding of the technological infrastructures required for governance and community building—the material needs of governance and civil society crucial for public services, such as water conservation, immigration reform, preventing bullying, and bike sharing. In this way, civic hacking can offer what Carol Pateman (1970) calls the “educative dividend” of participation by helping citizens better understand how their city works.

Also, contrary to Lodato and DiSalvo, civic hacking in Los Angeles has generated a small but sustained public, since the organization of events under the banner of civic hacking has continued three years after it started. The current weekly, incubation-oriented Hack for LA meetups have by the time of this writing realized projects beyond the prototype phase; indeed, in October 2016, Hack for LA announced the first working project to come out of its group meetings, called Food Oasis LA. The website steers users to local farmer’s markets, food pantries, community gardens, and grocery stores and was made in collaboration with the Los Angeles Food Policy Council.<sup>8</sup>

Finally, these accusations often elide key distinctions *between* types of civic hacking projects. In my fieldwork I found that civic hacking projects often narrowly focus on technological, rather than discursive, solutions. Yet I would like to modify the critique somewhat. Rather than trying to solve complex political problems, as these critiques would have it, civic hackers in Los Angeles more often focus on designing information services for city

administrations: technical solutions to traditionally administrative problems. Many apps and prototypes respond to city officials' or non-profits' request for better information infrastructure for service delivery. These projects suggest the inevitable and hidden role of information infrastructure to civic organizations and government—the banal aspects of governing or organizing that are not usually open to public input or scrutiny but happen through internal IT work. For example, demos at the 2013 Boyle Heights Hack for LA event showcased a map meant to help people find retailers that take food stamps in Boyle Heights, offered data on the Los Angeles river and park information, and drew from city data on water usage so that citizens could report broken sprinklers or pipes.

In other words, the projects at civic hacking events primarily engage with the mundane trenches of the ailing nuts and bolts of administrative information services. Garcetti stated the need for technologists to help with government services in his introductory speech to 2015 Hack for LA:

One thing I've always said is that government has the best market share out there. [...] But we generally have pretty lousy products. On the flip side, we have people with great products and ideas that have no market share. So if we just kind of get married to each other, we can take the innovation that is out there and take the platform that we have, the reach that we have, to get to everybody, and we can improve the quality of life for everybody.<sup>9</sup>

This specific role explains why participants are often distinct from Dewey's (2012) publics, as DiSalvo & Gregg rightly argued. This distinctive kind of participation is, as Christopher Kelty (2016) puts it, neither participation in electoral politics nor by publicizing opinions—the traditional public sphere—but rather participation in “the administration of the government's practical affairs.” (p. 82) These technocratic efforts are often about making administration run more smoothly in a post-recession context and to confront an “old mentality of hierarchy, bureaucratic complexity, and over-engineered, inflexible design.” (Ibid, p. 79) Code for America, following this need, embeds Fellows in cities to design public information services. Fellows have built apps to help citizens in San Francisco be better serviced by SNAPs (food stamps) by using text messages rather than letters or long phone calls.<sup>10</sup> In Rhode Island Fellows created an online registration for a school lottery process.<sup>11</sup>

A more significant critique of these “citizen experts,” therefore, is that participation in public information services is a very constrained view of civic activity, not because of its technical form necessarily but because, at the point at which it intervenes it has little choice but to be collaborative with government. In the characterization of the civic hacker as citizen expert, civic hacking does not challenge or take part in designing government policy, but

instead aids the government in carrying out its existing priorities. Most of the solicitations by government staff at these events understand civic hacking as a form of collusion with a government interested in technological improvement. Civic hackathons, with their appeal to network technologies and metaphors of decentralization, are not actually critical of power structure, but rather instrumental and positivist in the application of technology for service delivery.

In the next section, I offer a normative, rather than purely critical, approach to civic hacking, turning to literature on administrative participation. The most important distinction that the literature has not made is the difference between two types of participation: participating in carrying out administrative tasks, as the bulk of these projects are, and participating in a public sphere to influence policy or representative politics, by provoking discussion and criticism. In the next and last sections, I point out how civic hacking can be understood in terms of theories about administrative participation, before using these theories to call for more projects that move beyond instrumental collaboration towards dialogue and even critique.

### ***Theories of Participation in Administration***

A long-standing debate among political theorists who examine the role of administration in a democracy asks this question: should democratic participation play any role in the administrative branch of government? On one side of this debate are those who believe government experts should be left alone to decide and enact government policy. Technocracy and scientific management are characterized in this classic literature on administration as anti-participatory aids against “the tyranny of the masses”. One of the reasons expertise is needed in the first place, according to thinkers going back to de Toqueville, is for those instances when mass participation is an ill-advised idea (Goodnow, 1900; Wilson, 1887). To these thinkers, freeing administration from politics would be the best way to attract and reward competency.

On the other hand, public servants are not elected into office and so are not directly accountable to an electorate, making them a problematically anti-democratic aspect of governance. Mosher, a foundational scholar of modern administration theory, asks “How can we be assured that a highly differentiated body of public employees will act in the interest of all the people, will be an instrument of all the people?” (p. 19, 2016) Traditional literature in the field of public administration moreover characterizes administrative systems as top-down, rational, and authoritative, traits that purportedly conflict with expensive and inefficient values of equitable representation. (Berkley & Rouse, 2004; Kweit & Kweit, 1981; Rosenbloom, Kravchuk, & Clerkin, 2008;

Thompson, 1983) At the same time, public service is crucial for distributing public goods, and public institutions are accountable to an electorate that has some means to make demands on its formal structure through elected office.

In 20th century political theory, the debate over how power should be delegated between government experts and citizen participants is famously represented by John Dewey's response to Walter Lippmann's *Public Opinion* (1922), a treatise that calls for the need for expertise in government. According to Lippmann, experts require a place in democratic society due to the internal failings of humans who have not cultivated the habits nurtured over time by expertise, notably those of self-questioning, skepticism, and scientific inquiry. Lippmann accordingly believed both policy and its enactment should derive from experts. To give experts a more diminished role requires too utopian a vision of the non-expert citizenry. Dewey, in *The Public and Its Problems*, argues for a more limited role for experts, who are unelected and unaccountable to citizens. For Dewey, experts should only devise the means to enact policies and laws set by elected officials. Expertise still has an important role to play in politics, and Dewey advocated for scientific methods in policy setting. Yet experts should be the guides towards ends set by more democratic means.

Beginning in the 60s, as a response to a wildly ballooning federal administration, the United States began to allow more citizen participation in the area of administrative policy-making through transparency laws such as FOIA, environmental oversight laws, such as the National Environmental Policy Act, judicial litigation, public hearings, and whistleblowing protections. These examples of participation are largely adversarial—that is these policies were designed to expand the public sphere of deliberation by giving citizens access to information on which to check the power of administration. Nader's Raiders, of Ralph Nader's Center for the Study of Responsive Law, made formidable use of these new participation mechanisms to check corruption and incompetency in the Federal Trade Commission, the NEA, and the Food and Drug Administration.

Complicating this issue of administrative participation is the turn in administrative theory since the 1990s towards favoring private sector principles of efficiency and financial accountability (Kamensky, 1996). Sometimes called "New Public Management," administrative reforms during the Clinton years characterized citizens as customers or consumers with needs that public agencies respond to (Osborne & Gaebler, 1993; King & Stivers, 1998). Various theorists have made inroads into the question of whether and how government administration driven by efficiency and cost-saving can square with other ideals of democracy such as equity, citizen well-being, and environmental health. The reconciliation, according to some, comes about by the

practices and attitudes of public administrators themselves. Administrators should adopt a professional ethic as guardians of the public good who are responsible for citizens' basic rights (Denhardt & Denhardt, 2000). In this perspective, the remedy to an unaccountable administrative is civil servants themselves. Yet the means for citizens to inject themselves into policy debates remain in place at the federal and local levels through, for instance, open record laws, city council hearings, and the judicial system.

Civic hacking should be seen as a relatively new method for participating in the administrative branch of government; this is also how civic hackers have described themselves to me. Claims a liaison for the Hack for LA brigade, hackers short-circuit electoral politics entirely: "There's technical stuff that hacking implies, but the basis is that we're seeking and making change outside typical channels, like voting and getting legislation passed. Hacking is making change with government, but not in ways of last 100 years."<sup>12</sup>

In the final section, I apply some of the theories about participation in administration to civic hacking in an attempt to distinguish weak versus strong forms—those that use making and analytics not towards instrumental ends but rather as the starting point for critical engagement in an issue.

### ***Hacking the Administrative***

Civic hacking can be a way to democratize the instrumental step of administration that both Dewey and Lippmann considered the province of experts: designing the infrastructures and technologies of service delivery. Even as civic hacking deploys the wisdom of the crowds, it still appeals to a long-standing view since the New Deal that administrative policy should be based on technical expertise and a value neutral "professional spirit" rather than through ideology and special interests (Seidenfeld, 1992, p. 1519). Many civic hacking projects evoke the rationalized, technocratic management of the bureaucratic state operating through statistics and records collection but invite citizens to design the tools of management themselves. Civic hackers, paradoxically, engage in political participation at a stage of the process that many theorists argue are beyond politics. According to a Hack for LA liaison, civic hackers design information infrastructures that are necessary *prior* to addressing more political issues:

Our goal and mission is about access to housing, transportation and air quality, not technology. Technology is a toolset; it's the quickest way to get to those kinds of changes. That's why civic hacking is important. It's the fastest way to rebuild community and find other humans who want to do this stuff and make changes through data. To help other people build systems and get that out of the way.<sup>13</sup>

Yet as a result, too often civic hack projects take a weak form of participation that involve participants in administrative *tasks*, rather than *decision-making*, and as a result seek to merely reproduce administrative aims—participation at the level of delivering services per policies already set. In these projects, citizens and administrators often share an epistemological orientation of administrative problem solving that begins at the same starting point: government and citizen are in alignment, whether on the need to save water, service immigrants, have more efficient fire services, or encourage biking. In this sense, this kind of material practice does not start from a place of deliberation about societal problems but already at the point of their status as settled matters—at the point of policy enactment, not policy making. This form of participation has instrumental, pragmatic aims, rather than the goals of contestation, oversight, or structural critique.

While this type of civic hacking project predominates, civic hacking projects can engage in monitory and agonistic forms of participation within and beyond the administrative, either by calling for greater transparency, in the case of monitory forms, or, in the case of agonistic forms, by criticizing and challenging policy and administrative goals for gross power asymmetries, particularly between governments and citizens and between private industry and consumers. The best examples of these types of civic hacking projects do not use technology or government data to provide a service alone, but to make an argument or provoke debate on an issue.

The weakest form of this type are simple transparency projects. Govtrack.us, one of the earliest civic hacking projects to consider itself as such, publishes data on federal legislation and bills as well as information about Congressional representatives. In Los Angeles, an example of this work was a prototype of a website that displayed pie chart visualizations revealing city expenditures and salaries. Yet transparency alone, as some have argued (Gray, 2014), is not automatically tied to the safeguard of public well-being and human rights; it can also be used to support technical innovation, government efficiency, and economic growth (such as lucrative government contracts for open data software providers ESRI and Socrata).

More successful examples go beyond transparency to publicize a controversy. Chicago's Chi Hack Night, for instance, produced a text message alert system that sends a text when wind blows 15 miles per hour or more in Chicago, with the words "Wind Alert! Avoid petcoke exposure by limiting outdoor activity," and a link to learn more. Petcoke, short for "petroleum coke", are air contaminants known to be released by area facilities owned by Koch industries. The alert was part of a wider campaign to tighten government regulations on these facilities. In another example, Chicago's Million

Dollar Blocks project drew from the work done by Laura Kurgan's Spatial Information Lab at Columbia to design a map of the costs of incarceration by zipcode across the city. In these examples, software and data visualizations not only offer a service but also prompt questions and raise awareness about pressing issues of political concern.

In addition to the distinction between civic hack projects that produce information services versus transparency and issue publicizing, projects must be analyzed by how much they engage with the values embedded in the technologies they use. The Petcoke alerts and the Million Dollar Blocks projects, for instance, make their code available under free licenses. Million Dollar Blocks relies on open source software, using Open Street maps data rather than Google Maps. These projects avoid commercial software that engages in data-collection and convert the citizen-user into a consumer.

To conclude this analysis, imagine a quadrant. On one axis you have a scale moving from instrumental/collusive on one side and monitory/agonistic on the other, with transparency projects somewhere in the middle. With the other axis you consider value-awareness, on a scale of no awareness to fully aware, such that all technologies used exhibit some consideration towards their relationship to the user.

### ***Beyond Civic Hacking***

Thomas Lodato (2014), another researcher of civic hackathons, writes that he hopes to see “hacked civics”, not civic hackathons, because

hacked civics are beyond user-friendliness, beyond vowel-less ventures, and beyond end-user license agreements. These hacked civics rethink the state; they cobble together various citizenries; they break and reassemble civic life; they don't agree that the answer is technology; and, most of all, they don't agree on civics. (n.p.)

Following Lodato's provocation, perhaps civic hacking as a term has too much baggage, and we need another term to understand how people can use their technical skills to contribute to the political and civic sphere. The Million Dollar Blocks Project, for instance, does not advertise itself a civic hacking project, and it derived primarily from an academic setting. To one of my interviewees at a Los Angeles civic hack night, Million Dollar Projects counts as an important example of civic hacking. Yet perhaps we need new terms for these projects that use data and software towards humanistic, agonistic, and pointedly political—not only instrumental—ends.

## Notes

1. <http://opengovernmentdata.org/#sthash.YYinvpoQ.dpuf>
2. Interview conducted December 8, 2013.
3. B-corporations is a for-profit corporate entity that includes positive impact on society and the environment as one of its defined goals, along with profit.
4. Interview conducted June 22, 2016.
5. Ibid.
6. Heard at #Tech LA, May 31, 2014.
7. Interview conducted February 8, 2016.
8. <https://foodoasis.la/>
9. Heard at Hack for LA on June 6, 2013.
10. The app is called Promptly: <https://github.com/codeforamerica/promptly/wiki/How-to-Promptly>.
11. The website is called Golden Ticket. <https://github.com/codeforamerica/golden-ticket-console>
12. Interview conducted July 9, 2015.
13. Interview conducted July 9, 2015.

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