Organizational Templates, Performative Claims-making, and Expert Work in Open Data Advocacy: Mobilizing Grassroots Participation in Toronto

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Hackathons are about solving problems but what problems do they solve? Current discussion on hackathons as open data activity focuses on assessing their ‘impacts’ in terms of economic innovation and democratic engagement (Badger 2013; Schrier 2013; Johnson and Robinson 2014; Morozov 2014), and with some exceptions (DiSalvo, Gregg, and Lodato 2014) has ignored the interplay between political strategy and expert work that underlie hackathons as an form of collective action in open data advocacy. This paper draws from on going fieldwork in Toronto, including data collected thus far from twenty interviews with data practitioners and hackathon participants and ethnographic observation in local hacking initiatives, to situate hackathons as vehicles for social mobilization, performative claims-making, and the articulation of expertise in fields of open data activity. Drawing analogy to repertoires of collective demonstration found in varied fields of conventional and transgressive politics (Fligstein and McAdam 2012; McAdam, Tarrow, and Tilly 2001; Tilly 2008; Armstrong and Bernstein 2008), I suggest open data hackathons serve as claimsmaking performances used to build legitimacy and craft political identity around open data policy issues. In the collective act of “solving problems” via technical work performance, hackathons are ritualistic vehicles to publically diffuse open data frames into new problem domains (Snow et al. 1986; Snow and Benford 2000), mobilize movement bystanders and resource networks, and bridge collective demands around open data. Meanwhile, rather than serving as substantive innovations in themselves, demoed apps and technologies derived from hackathons commonly serve as exemplars to symbolize future impacts of open data innovation to participants and external audiences alike (c.f. DiSalvo et al 2014). In short, open data hackathons comprise a repertoire for strategic claimsmaking and mobilizing participation in open data politics.

However, as a mobilization and claimsmaking strategy, hackathon processes are strongly shaped by fields of work and expertise, which serve to constitute specific problem solving performances and constrain their capacity mobilize broader publics. Hackathons are sometimes conveyed as democratizing exercises that creatively employ technology via “co-production” processes characteristic of knowledge-diffuse “network societies”. This depiction notwithstanding, hackathons are bounded by categorical divisions of work and expertise, which implicate professional relations over the control of tasks and problems related to using data for productive ends (c.f. Abbott 1988; Eyal 2013). The historical relationship of hackathons with technical domains and programming cultures, their increasing diffusion in tech industries and academic STEM disciplines, as well as their technique-based problem solving, all help contextualize an organizational and cultural logic used to enact, demonstrate, and produce expert performances. Metaphorically, open data hackathons might be termed “avatars” (c.f.
Abbott 2005), which intersect distinctive political and professional fields of social activity by replicating technical work arrangements as a non-traditional means of participatory politics.

For open data community organizers, integrating political-based and work-based strategies – e.g. framing collective claims and group identity, dividing work tasks among professional/non-professional participants, structuring collaboration incentives, balancing deliberation process with production process, etc. – represents a core organizational problem in employing hackathons for strategic advocacy purposes. As I show, some organizers view the productive output of hackathons, i.e. substantive technological innovation, as secondary to the demonstrative role of these events in raising the political profile of open data. For others, creating useful tools through collaborative work is a primary organizational concern. In this paper, I draw on two Toronto case studies to highlight some tensions involved in mobilizing political association through hackathons and highlight different strategic approaches to staging collaborative hacking events.

In the first case, #BikeShareHackTO organizers adopted a conventional developer-centric hackathon to produce city cycling apps from targeted government datasets over a three-day stretch. The organizers of #BikeShareHackTO incentivized participation largely around the professional concerns of software developers, while hoping to foster links between developers and local cycling advocates by framing mutual interest around open data and municipal cycling policy. The approach stressed work productivity and developer expertise as primary and distinguished a secondary role for non-developers as an audience that could be educated about open data impacts. The event successfully produced a set of app and data analyses and was viewed positively by developer participants, but had weaker outcomes in terms of mobilizing participation outside “tech” professionals. The second case, #Hackgoeson, used an experimental approach to integrating mobilization and production objectives through a “sustained” hackathon. The organizers of #Hackgoeson targeted several local policy organizations to serve as “problem owners” and then mobilized teams of diverse professional and political backgrounds to devise long-term open data projects around these problems. In their attempt to decentralize expert participation, #Hackgoeson organizers explicitly sought to get more “people into the open data room” and, in particular, local political bystanders to open data policymaking. However, during its four month duration, #Hackgoeson was consistently plagued by work-based issues, as professionally motivated developers and more politically-motivated activists struggled in finding shared attachments to ongoing project work. In the end, while some new political ties were formed, the #Hackgoeson projects themselves collapsed without notable productive output. Drawing from these findings, I conclude that more scholarly attention be given to the integration of political strategy and work-based practice that underlie “avatar conundrums” in using hackathons as instruments for open data mobilization.

**Hackathons: Unpacking Social and Historical Contexts**

An open data hackathon is a coordinated event where collective actors use technology and data to collaboratively work on civic issues in a physical space (Johnson and Robinson 2014). Often these events can feature a time-bounded prize-based contest where developers and technologists compete to produce technical applications to meet specified ‘civic’ or ‘social’ challenges. The contest format organizes a cultural hacker practice, lab camping to develop code, in a meritocratic game that incentivizes ‘hacking for good’ as social entrepreneurship. Contest-based hacks are designed to produce application prototypes, for clients or panel judges, within a defined time frame, typically 48 to 72 hours though sometimes longer.
Hackathons have proliferated in computer tech worlds since the late 1990s, but the first representative instance of a “civic hackathon” was the “Apps for Democracy” contest in 2008, held by the City of Washington DC. This month-long event, timed with the release of the City’s first municipal open data catalogue, produced 47 smartphone applications vying for $50,000 of prize money. In the event’s aftermath, hackathons and app contests have notably diffused across locales, becoming a vehicle to publicize ideas of open government and disseminate knowledge of open data catalogues. In 2013, a National Civic Day of Hacking was held in the United States, attracting participation from a large contingent of government agencies and non-governmental organizations in “an intense Saturday of coordinated digital voluntarism” (Irani 2015, 8). In March 2014, the Government of Canada held its first national hackathon, the Canadian Open Data Experience (CODE) and staged a second edition in February 2015.

In taking stock of hackathons as open data practice, it’s important to recognize both their diverse and uniform aspects. For instance, though “civic hackathons” are commonly associated with government sponsorship, they can also be organized with support or under the leadership of non-governmental actors, who have goals distinguishable from those of government agencies and play their own role in shaping event objectives. Other open data hackathons take place outside formal government participation, though they may target specific government data collections. Still others may not concern government data at all and can target data used by non-profits, advocacy groups, or corporate entities. Likewise, though open data hackathons are most frequently associated with producing apps as an outcome, this is not a universal standard. Hackathons embrace a range of productive targets: from statistical analysis and hypothesis testing for policymaking purposes, to education and skill-development around data use, to crafting data visualizations and maps. Some events last merely hours, other like #Hackgoeson, can stretch out a hack for weeks or even months. Software developers and other tech professionals usually represent core hackathon participants, but some events also experiment with cross-expert collaboration or include “non-technical” participants, whether as consultants to developer projects or as full-fledged members in contributing to group problem-solving tasks. Similarly, while prize competitions are commonly used as key motivational mechanisms in large hackathons like CODE, small-scale and non-industry hackathons may dispense with competitions altogether and focus more on political and community engagement to mobilize participatory interest. Hackathons may range in size from but a handful of participants to several hundred or even thousands.

Yet, in midst of diversity, hackathons are also bounded and constrained as interactive episodes with certain discernable routines and rituals, which provide a means to identify these events and analyze them, through a dramaturgical lens, as a “performative repertoire” of collective action (c.f Tilly 2008). Hackathons embody a recognizable set of recurrent social interactions involving collective technical work. Some of this interaction is pre-arranged and “backgrounded”, as part of an organizational structure, while other interaction is improvised and “foregrounded” as part of the enacted performance (c.f. Goffman 1959). Hackathons take place inside physical environments, which are conducive for productive technical work, such as labs or libraries or research facilities. There are recognizable beginnings, middles, and ends to most hackathons, usually articulated through formal processions and ceremony. There are also distinguishable roles and group identities at hackathons, which can include: hackers, organizers, sponsors/clients, mentors and technical advisers, panel judges, political representatives (e.g. city councilors) and organizational spokespeople (e.g. data managers), and targeted audiences who might be external to the event happenings itself (e.g. media, organizations, politicians, etc.).
These roles may be further broken down into smaller specializations, as with the “hackers” category: programmers, designers, researchers, project documenters, demo presenters, project leaders, those given miscellaneous tasks, etc. Moreover, beyond the visible components of collaborative work at hackathons, there are also background infrastructures (Star and Ruhleder 1996) that enable hackathons to transpire. This notably includes data itself, which may serve as infrastructure when hackathon work focuses on using targeted datasets to design applications and analyses. But data may also be foregrounded as a work component as well, as when hackathon activity is used to discern “gaps” in existing datasets or seek out new data sources.

The above represents a basic description of some regularities generally observed at hackathons. As Charles Tilly suggests, collective action repertoires are sites of learning and innovation and they dynamically evolve and change over time in their function and practice (2008). The flexibility and divergence from one event to another varies depending on the repertoire at hand. Rigid repertoires of collective action, like military drills, reproduce the same template over and over with almost no change or variation. Very weak repertoires, like people walking through crowded streets, reveal high degrees of spontaneity and divergence. Hackathons can be situated within these extremes. As an emergent repertoire, open data hackathons remain highly experimental and fluid. Nonetheless, there is also evidently discernable consistency and symbolic coherence to these performances. For example: they are commonly executed by a well-defined groups of actors (e.g. governments, advocates, hackers); they are connected to specific domains, such as “open government” or “social innovation”; participants who partake in these events are aware of the performance by giving them names (e.g. ‘Bike Share Toronto Hackathon’) and actors can associate different hackathon episodes with one another. Hackathon organizers craft event instructions and institute divisions of labour. Participants anticipate performance requirements and recognize when a performance is terminated (Tilly 2008, 27). In short, while open data hackathons diverge from one instance to the next, this divergence and innovation can be viewed in some degree as constrained.

Genealogically, the historical roots of hackathons are seen to lie in the diffusion of hacker conferences within transnational and online developer communities, first emerging in the 1970s, but becoming commonplace in the 1990s (Coleman 2010). In terms of practice, a key difference between the traditional hacker conference and the contemporary hackathon is that the ritual practices of the former were deeply associated with activity of long-standing online and geographically distributed open source programmer communities, and mainly served in group functions by fostering social solidarity and enhancing technical knowledge within communities of hackers, through the cathartic exercise of working collaboratively in a physical space over a condensed spectrum of time. Hacker conferences were a space for open source communities already working on long-term online software projects, such as Debian, to replenish and substantiate social bonds, forged initially online, through face-to-face interactions. While they may still play this community role, a prominent discourse emerging in open data politics, perhaps influenced by a Silicon Valley reading of hackathons as “entrepreneurial” devices (c.f. Irani 2015), has popularly reframed these events in a much different light: as productive instruments for autonomous innovation. Hacker conferences were supplemental to long-term communal open source innovation projects, used to remedy small technical issues in large-scale projects, rather than comprising an isolated vehicle for productive innovation in and of themselves. In newer articulations, community embeddedness has been discursively displaced in depicting hackathons as sites for civic innovation within “open data ecosystems”.

Nonetheless, in contrast to market libertarian framings, hackathon practices are very much constituted by social environments. As hackathons popularly diffuse in various fields –
professions, corporate industry, post-secondary education, government, and fields of advocacy, etc. – their practices and uses shift to reflect norms and strategies within these environments. Communities of practice play a critical key role in generating reflexive knowledge about hackathons that help constitute and alter repertoires. This includes the distribution of “How To” documents, online summaries and post-event evaluations, as well as emerging associations and online hubs that enable the diffusion of shared knowledge around hackathon practice. For example, within university settings, Major League Hacking (MLH) is a key North American network that diffuses norms and helps to standardize hackathon practice in post-secondary student environments. Along with providing resource and advisory support to local student organizers, MLH also employs instituted codes of conduct and instructions used to model and support collective hackathon performances. In the case university-based hackathons, these templates reflect an integration of specific educational objectives with identifiable labour market concerns, often involving the balancing of specific student-focused issues (accessibility, safety, resources, mentorship, fun, job opportunities etc.) with interests for post-secondary institutions and sponsoring market actors (job placement, hiring, training, and corporate promotion). At such hackathons, technology production is but supplemental to these primary aims. Similarly, when theorizing hackathons in relation to open data advocacy, it is important to interrogate whether the discourse of innovation matches up with the realities of their practice.

Challenging Innovation Narratives Around Hackathons

Existing discussion of hackathons in open data politics has largely focused on objectively assessing ‘impacts’ of hackathon phenomena for economic or civic innovation. There are clear reasons for this focus, since ‘innovation’ is a common buzzword used by government agencies and other organizations that employ hackathons. Academics and other observers have been interested in how well hackathons and app contests ‘measure up’ in terms of innovation, since their popularity may be seen as signaling the increased legitimacy and acceptance of open data in the “policy mainstream” (Johnson and Robinson 2014). This has led to a paradox in open data advocacy: hackathons are used to represent the promise of open data for innovation, yet they are also seen by many to perform terribly in realizing that promise.

This view was notably articulated by former CTO for the City of Seattle Bill Schrier in a July 2nd 2013 blog post: “apps contests are not just overdone – there are just so many of them – but actually are becoming counterproductive, turning off developers and governments. In fact, they are stupid…How many apps from hackathons or apps challenges or contests are monetized? How many of them are still active and downloaded and used? My answer: few, very few.” In Schrier’s account, the innovation problem does not lie with hackathons themselves so much as the existing state of open data infrastructures and the incapacity to profitably ‘scale’ innovations that come out of local hackathons. Schrier argues for culling civic hackathons until current obstacles limiting the monetization of apps can be overcome and so to avoid “turning off” developers from participating in them. However, Silicon Valley dreams of rapid technological innovation made possible through hackathons, which blames innovative failure on data infrastructure as opposed to, say, the basic constraints of time or a disembedded production structure, seem highly dubious. While it remains a hypothesis to be tested (Johnson and Robinson 2014), anecdotal studies of hackathon outcomes (source) as well as views from hackathon participants I’ve interviewed do not incline to a view of hackathons as competent innovation factories, at least without other mechanisms in place to incubate prototyped designs into robust tools. Among Toronto software developers and tech workers I
interviewed, the view that hackathons are weak forums for useful innovation was common. One start up developer echoed a view of many: “The problem with hackathons is there is no actual measures after they finish and the product dies after that. That’s the limitation of hackathons” [RS 1]. Among developers, hackathon innovation barriers were not identified with open data infrastructure so much as the impracticality of disembedded production, which cannot consistently cultivate tools for robust use or sustained marketability.

Moreover, contrary to assumptions that poor innovation outcomes lead developers to turn away from hackathons, those I interviewed did not associate their participation at these events with commercialized product development. This finding is important when considering critiques around volunteer labour at hackathons. For example, Johnson and Robinson (2014) question whether hackathons provide reciprocal benefits between hackathon conveners, who ostensibly acquire new economic goods through the process, and the participants who volunteer time and labour. The authors ask: “Are hackathon participants fairly compensated for their software development efforts, and importantly, do they expect to be? …[A] focus on reciprocity is critical, as we run the risk of civic hackathons becoming ‘virtual sweatshops’ in which the convener unfairly derives economic value” (2014, 353). In raising this concern, one interviewee summarily dismissed it in light of the poor economic value produced by hackathons: “You mentioned ‘free labour’ there about hackathons. I don’t think that’s a particularly interesting line of thought. Because the word ‘labour’ suggests making some product that has some value, but nothing of value is ever produced at a hackathon.” [RS 2]

Developer Motivations: The Importance of Community and Professional Recognition

If not for their innovation and materially productive potential, why then do developers volunteer their time to attend data hackathons? In interviewing non-organizer developers who participate in Toronto-based open data hackathons, the four most common answers provided were: (1) supporting “community” [whether an open data, developer, or advocacy-based community]; (2) occupational networking and job opportunities; (3) skill development and knowledge exchange; (4) professional recognition.

Supporting Community:

“I go to these events to show my support for the open data community and that I stand behind the organizer’s initiative.” [RS 2];

“Mostly hackathons are good for engagement. You get some great press. You get to show community engagement. And [the open data] community gets a great benefit out of that” [RS 1].

“I was interested in [attending] this event for two reasons: first, because I was looking for a code-based community project to work on, and, two, because what the organizers were trying to do, develop these community-focused projects, was in line with why I took up coding in the first place.” [RS 3]

Occupational Networking and Job Opportunities:
“I only got into web development this year. I was in marketing before...I’m getting by right now with freelancing and still looking for a permanent job...I thought [a hackathon] was a good way to make contacts.” [RS 4]

“[Hackathons] are great entry point for students because you can connect them to [tech] companies and jobs in the city. Employment opportunities are always the big selling point for getting students to come out.” [RS 6]

Skill Development and Knowledge Exchange:

“The goal was just to see where our coding were at...My friend had remarked that my Ruby [skills] had gone beyond where he could understand it...and I was like ‘yes, that is awesome’...his focus is on Java Script and design...I said ‘I'll go through some databases. You make shit pretty. And maybe together, we can come up with a thing.”’ [RS 3]

“It’s about the mentoring opportunities that come from [hackathons]. I remember being a young dev and going through school and not having the happiest time with it...You get chances to teach and help but outside the classroom...and I get to learn things.” [RS 7]

Professional Recognition:

“Devs come out cause you can get some recognition for your work. I get some free food and I can pitch my idea to the room and get that recognition. That’s the reward I get for my labour. Recognition is a big motivation for devs because, yeah, time is labour. I want to be socially recognized for my labour.” [RS 1]

“I’m not much of a programmer, so I’m not going to be doing the development stuff. I don’t know about the policy [issues]. But the other guys in the group do. I let them do that. My expertise is in social media, marketing...UX. That’s what I bring to the project. I will make their app look good...I want this project to be part of my [work] portfolio and if I can get a reference from the [group leaders] that will be good.” [RS 4]

These findings contrast with what the ‘innovation’ narrative assumes, at least in terms of adding complexity to the motivations of developers in participating. The statements above importantly situate hackathon participation in relation to professions and work process.

In itself, finding there are connections between hackathons and work professions is unsurprising. Hackathons are now increasingly used in tech industries and fields post-secondary education as “talent fairs”. At the conclusion of the Canadian Government’s 2015 CODE hackathon, President of the Federal Treasury Board Tony Clement declared: “CODE 2015 has been an inspiring experience, showcasing a wealth of Canadian talent, from developers and designers to budding entrepreneurs. All participants demonstrated the potential open data has for job creation, opportunities in the high tech field, and future innovation”. Similarly, the executive managing partner of CODE Ray Sharma claimed that the hackathon: “Showcased not only the breadth of data available to Canadians, but also the depth of talent and drive to succeed that’s ingrained in Canada’s developer community”. While seemingly self-evident, making connections to professional categories is important in conceptualizing how organizers instrumentalize mobilization in hackathons through professional identities and how non-professional participation is arranged in relation to them. Responding to Johnson and Robinson’s query as to whether hackathons might become new factories for economic
production and government procurement of services (2014): it does not appear likely. At the same time, professional work is core to evolving hackathon repertoires. While depicting hackathons as “virtual sweatshops” may be extreme, questions around reciprocity, work, and participation incentives do remain very much relevant. In my interviews, the central driving motivating developers to participate in open data hackathons concerned professional returns (opportunities for work, networking, skill building, professional recognition, etc.) rather than say, valuing open data or transparency as a political good or simply wishing to be a “good” citizen (notably, some hackathons also do pay participants).

Moreover, professional boundaries shape constraints in mobilizing broader publics through open data hackathons. As Gil Eyal argues, fields of expertise are defined by tensions of expert control vs. expert generosity (2013). Particular expert domains compete for legitimacy and ascribed jurisdiction over specific work tasks and problems (Abbott 1988). However, for expert domains to diffuse and grow they must be able to translate and reframe the problems of others (e.g. clients) in a way that enables non-experts to find benefits in adopting their systems. Hackathon mobilizations around open data are similarly defined by this tension. Without thinking about non-expert reciprocity, i.e. what “non-technical” publics may receive and provide to technical production, open data hackathons can serve as exclusive spheres that simply isolate and reproduce professional jurisdiction and limit the broader mobilization potential of these events. As will shown in my Toronto case studies, developing political strategies and frames that integrate non-technical actors into open data politics while attending to the jurisdictional motivations that drive expert participation is a difficult challenge in using hackathons for advocacy-focused collective action.

**Advocate Motivations: The Importance of Claimsmaking and Mobilization**

Turning now to the perspectives of hackathon organizers, one long-time Canadian open data advocate and experienced hackathon organizer, was emphatic in arguing for researchers to disarticulate innovation discourses surrounding open data hackathons from their strategic use or political ends [I have underlined some key points]:

**Advocate:** [My local network of open data advocates] think hackathons are for journalists. People say ‘oh hackathons are not effective’ – Of course they’re not! Of course they’re not! Why would you even waste your time criticizing them, because the people that are organizing them don’t think they’re effective. So what are you really doing? Why spend so much time analyzing hackathons? They’re only for journalists.

**Me:** Hmm, that’s interesting when thinking about the whole purpose of a hackathon – isn’t there any participatory motivations?

**Advocate:** There’s lots of motivations. Lots of different motivations. But to criticize it from the sense [they’re ineffective] – the people that organize [a hackathon], organize to say we did it on the Internet after and to journalists. So we can have more political legitimacy. Do we organize it because it’s going to be great for innovation? No. Do we say that it’s going to be good for innovation? Yes. Can a researcher hold those two ideas together: what we say in the brochure doesn’t necessarily reflect our political ideas and strategic thoughts? Yes...
Me: That’s an important observation in itself - there is a strategic end, hackathons are about political claims, it’s a performance…

Advocate: I wouldn’t say it’s a ‘performance’ – performance implies it doesn’t have a utility, right? Or it misses that question.

Me: I mean like how a protest or political demonstration is a performance –

Advocate: Sure. There is a performative aspect to it.

The advocate’s expression – ‘hackathons are for journalists’ – is an entry point in thinking about why organizers stage hackathons, beyond the innovation narrative, for strategic claimsmaking purposes. To be sure, the notion that open data hackathons are “only” for journalists was far from a universal belief among the open data advocates and hackathon organizers I interviewed. Moreover, for organizers of this paper’s two case studies, substantive production was certainly an objective. Nonetheless, it critically highlights the instrumentalization of hackathons for uses beyond innovation and, in particular, the mobilizing of audiences and bystanders external to an existing open data community.

As with linking to professional work, arguing that hackathons comprise a demonstrative strategy for open data advocates can appear self-evident. Indeed, existing scholarship has stressed the largely representative role of technologies produced at hackathons (DiSalvo et al. 2014; Irani 2015). However, beyond technology, the symbolic use of hackathons in constituting a discernable collective body of actors is also worth noting. Hackathons are fundamentally social instruments that ‘bring people together’ and ‘show something’ emerging from that activity. Here, some links can be made to collective action in other fields of political activity. Social movement scholarship has long stressed the role of unconventional collective action, like street marches or sit-ins, as modes of articulating collective demands of groups in social environments. Specific repertoires of demonstration are strongly linked to the collective identities and the social fields of actors involved. As a contemporary example, licensed city taxi drivers who demand stronger restrictions on the incursion of Uber’s rideshare service into local markets have engaged in a series of road blockades by using the cabs they drive to articulate their political claims. In the act of coming together within a space, political groups serve to demonstrate their legitimacy through visible numbers (Tilly 2008). Open data hackathons may not appear as explicitly political or symbolically coherent as a taxi protest, which is undeniably true: most hackathon participants I interviewed did not view their activity as inherently political or strongly attach themselves to a “civic hacker” political identity. Nor do hackathons take place in environments as publicly visible as streets. Nonetheless, hackathons can serve the claimsmaking of organizers through an embodiment of collective demands for open data, in terms of participant numbers, and as a staged demonstration of “open data work”. In other words, for political actors, mobilizing a collective act of problem solving with data can be just as important for claimsmaking purposes, if not more so, than the substantive results that arise from collaborative problem solving itself.

[SECTION NEEDS TO BE ADDED]
Case Studies: How Political and Work Processes Are Integrated in Hackathons

In the following two case studies, I compare how organizers attempted to integrate political and work-based concerns in staging public hackathons for advocacy purposes. In the first case, the organizers of #BikeShareHackTO appealed strongly to the professional motivations of software engineers by crafting work arrangements to “get things done” in terms of designing software applications. In the second case, the organizers of #Hackgoeson sought to facilitate broad based mobilization around open data work by underplaying divisions of expertise and not structuring work roles among participants. Both efforts are worth comparing for the mixed outcomes that resulted from each strategy.

Case Study 1: #BikeShareHackTO – Getting Work Done

Mobilization and Framing Strategy

#BikeShareHackTO, which took place from August 13th to 15th 2014, emerged out of negotiations between three local actors: Bianca Wylie, co-founder of the open data advocacy group Canadian Open Data Institute (since renamed the Open Data Institute Toronto), Michael Markieta, a GIS consultant for the engineering firm Arup, and staff at the City of Toronto’s Bike Share rental agency. Wylie pursued cycling data hackathon related to urban cycling issues as early as February 2014 after meeting with representatives of Cycle Toronto, a community group advocating for increasing bicycle use and safety. Toronto’s cycling community appeared as an ideal population to mobilize around open data issues. First, cycling advocacy has strong grassroots support in the city, with a long legacy of activist causes in Toronto around transportation policy and public space urbanism. Second, in the recent years, advocates and city staff have been increasingly incorporating and experimenting with smartphone technologies and crowd sourced data for policymaking purposes. This included the development of the Toronto Cycling App, which tracks and records cycling trip information through GPS on user smartphones, providing means to map common routes and analyze cycling networks in the city. Third, from the development Cycling App and other data-inspired interventions, there was existing crossover between local networks of cycling advocates and technology developers in the city. At Toronto’s Open Data Conference in February 2014, Wylie had wanted cycling to be part of the multi-issue hackathon associated with that event, #Hackgoeson, but there was no participant uptake on the issue at the time. In late April 2014, Wylie came across a tweet from Michael Markieta to Bike Share Toronto challenging the agency to run a hackathon similar to #HACKAKL, which was to be staged in Auckland New Zealand in May. Wylie, a professional facilitator by trade, saw an opportunity and replied with an offer to help organize the event.

Securing a positive response from the city and a promise of collaboration from Arup, Wylie then enrolled Naomi Freeman, a software developer and fellow #Hackgoeson member, to be co-lead on a four-member organization team (with Markieta as technical assistant and a city staff worker on communications and logistics). Wylie and Freeman took on most of the planning responsibilities including, critically, finding a venue, which they found in BitMaker Labs, a city programming college and developer space. BitMaker also pledged the organizers assistance in terms of sponsorship and helping to promote the event. They secured other further sponsorship from Cycle Toronto, the City’s open data initiative (Open Data Toronto) and its civic engagement program (Making Conversations), as well as TechGirls Canada, a
national gender and tech advocacy group. From the outset, Wylie and Freeman targeted two populations to mobilize: 1) members of local tech industry (specifically developers); 2) cycling community members and advocates. A core mobilization goal of the event, beyond promoting city open data initiatives, was to foster links between the two local populations by bringing them into the same space around open data and cycling policy. They were hoping to mobilize around 70 “tech” and 25 “non-tech” participants. Following Markieta’s suggestion, the organizational design of the event drew inspiration from earlier transport hackathons that took place in other cities, such as the Bay Area Bike Share Data Challenge and the Massachusetts Transport Hack.

As a framing strategy, #BikeShareHackTO bridged distinct interests among a diverse set of political actors and groups. For Wylie, the event responded to the educational mandate of ODI Toronto and her strategic goal of raising public awareness of open data outside government and tech communities. As noted, employing cycling and Bike Share data for the hackathon was a framing strategy to link cycling advocates to open data policy issues. However, beyond constituting the data category, the organizers also tried to frame as the event itself as inclusive, to encourage strong participation from both developer and cycling parties. The formal name of the event – The Bike Share Toronto Hackathon & Design Jam – stressed a bifurcated yet inclusive structure of work and participation. I speak more about this structure below. Meanwhile, the hackathon also framed and instrumentalized open data demands by further leveraging the City in its efforts to open up city datasets. Notably, the targeting of cycling data responded to Arup’s organizational interests as expert consultants involved in government transport planning and infrastructural design. In challenging of Bike Share to sponsor a hackathon, the event helped leverage the release of government data and, most importantly, Toronto Cycling App data, which had yet to be made publically accessible. Toronto’s Bike Share program also had their own interest in promoting their poorly funded service and used the event as part of an ongoing marketing plan and recruitment of private funding (in December 2014, they would secure a sponsorship deal from TD Bank Group). BitMaker Labs also had interest in raising public profile of their programmer school, as well as promoting coding skill and technical education as a social good. Finally, the event also became a vehicle to raise gender advocacy and inclusivity issues within Toronto’s tech community. Freeman wanted to ensure the hackathon embraced inclusive values after encountering misogynistic episodes working in tech firms and participating in past hackathons. The sponsorship of TechGirls Canada resulted from Freeman’s strategic interest in instituting a code of conduct at the event and, in doing so, helped mobilize another actor in Toronto’s open data advocacy field.

**Divisions of Work**

The event’s two-pronged mobilization strategy to mobilize both “tech” and “non-tech” participants and developed an organizational structure that distinguished each group’s participatory motivations and skill sets, leading to a bi-furcated arrangement of social space and a hierarchical division of work. A developer-centric hackathon contest served as the primary performance in the event itself, extending over most of the assembly’s duration, beginning Friday evening and concluding Sunday afternoon. Though no formal rules established hackathon participation as exclusive to those with technical skill, the event structure was designed with explicit understanding that developers and technical workers would be core hackathon participants. The contest design emphasized a skill competition where participant teams would
develop a tool using specific datasets in order to “get more people cycling and using Bike Share”. For the organizers, the challenge was to be both demonstrative and productive, as they hoped that the open data tools produced would ultimately find clients and utility in the event’s aftermath. As Freeman explained, the aim was for a hackathon where skilled developers “could get things done” and not get bogged down by group members participants with weaker data skillsets who had to have things explained to them. In event communications, distinctions between expert and non-expert identities were prominently distinguished. For instance, on the event web page, under “Hackathon Challenges” the text says:

“DEVELOPERS/DESIGNERS/MAPPERS – THIS IS FOR YOU!”

“Non-techs” were included in the event through a series of secondary activities that were designed around the main data hack. On the event page, the events were categorized as “Design Jam and Tech Fun”:

EVERYONE ELSE - THIS IS FOR YOU! CYCLISTS/TRANSPORTATION PEOPLE/DADS, MOMS, KIDS/CITY-LOVERS!!

If you’re not a techie but would like to contribute as a cyclist, transportation policy person or in any other way, you are more than welcome! Come by Friday, Saturday or Sunday (or all 3!) and get involved in the intro to tech talks, planning and data talks, family fun for kids learning with video tools (thank you Mozilla!) and more. This is when you’ll have a chance to play with the data, see what it tells us, and talk about how it can be used. We’ll also have a session for transportation enthusiasts and cyclists to chime in and talk about the work that the hack is producing, as it happens.

Consequently, “non-tech” participation during the hackathon performance itself was arranged in the capacity of an observing audience, with talks and data workshops taking place one floor below the hackathon establishing a distinct social space for participation. Worth noting is how organizers categorically distinguished participatory incentives in their communications. While organizers framed “non-tech” incentives in terms of “learning”, “fun”, and having “a chance to play” with data, they framed “tech” motivations in terms of rewards for work, both in terms of prize recognition and promoting and supporting work after the event itself: “We will continue to work with Bike Share and the City after the hack to support and grow the work done on this weekend. We also have several partners who want to promote the work being done!”

Ultimately, the bifurcated mobilization strategy had mixed outcomes at #BikeShareHackTO. While some members of Cycle Toronto were present at the event on Friday evening, the expected weekend turnout of non-tech cycling advocates did not occur. The Saturday afternoon skill-share workshops that aimed at non-tech participants were nearly empty. Though 30 pre-event registries were made by “non-tech” actors, next to none came out to the event itself. While the lack of non-tech participation could be due to any number of factors (bad weather, overlap with other community events, etc.), it does raise questions over the framing of non-tech participation and what serves as meaningful incentives for non-tech publics to participate at tech-centered open data hackathons.
Creating A Data Infrastructure

Nonetheless, one benefit in separating “tech” and “non-tech” participation during the hackathon was that it allowed organizers to better focus pre-event planning on getting the data infrastructure in place to facilitate the technical performance. Obtaining the data early and ensuring it was usable was a critical planning objective. Freeman had learned this lesson after taking part in the Federal Government’s 2014 CODE app contest in Ottawa and finding many of the featured datasets unusable due to omissions and errors. Though the organizers had wanted to have the data one month before their event, what they initially received was batch was but partial. Wylie and Freeman engaged in “a whole lot of back and forth emailing” with city staff to try to secure the rest. These communications started off “polite enough” but, as the August 15th deadline approached, they used more force and directness in their emails to “push the issue”. Just days prior to the Friday start of their event, the team received its most crucial piece – data from the Toronto Cycling App. However, upon obtaining the app data CSV file, the organizers discovered it had been extracted from the city database “incorrectly”. Markieta described the problem to me:

They [city staff] had extracted it in four quadrants, to make up the four corner of the city to some degree. I postulate this was done to reduce the size of the extracted data. However, the issue with splitting up the data in such a way is that we are dealing with line and routes that would inevitably cross the quadrant boundaries that that they would extract by. Furthermore, they extracted the same two quadrants twice, duplicating the data for that region and leaving us a hole in the data...I had to spend time formatting the date column, removing entries/trips that were from test events [in early implementation of the data collection system]. The data was extracted by year as well so that required us to combine the data. I also did QA [quality assurance] to check for station numbers/names that did not exist. Also, some entries of postal codes were incorrect. You had entries like ‘###AAA’ and such...

Markieta devoted a sleepless night the Thursday before to get the data “usable”. In the end, the data was not perfect and some compromises had to be made. For instance, Markieta believed it would have been better, for big data processing purposes, to export cycling app data in a cloud database, which then could be accessed by a URL and user pass at the event, as opposed to the CSV file the City gave them. There were also live “corrections” Markieta needed to perform in the beginning hours of the event itself. Overall, a few disappointments aside, the team was largely satisfied with the data quality for the event by giving hackathon participants a working data infrastructure. Beyond cleaning data, the organizers also arranged other infrastructure to facilitate hackathon work, including assembling tools and links for programmers to software license templates, data tools, mapping tools, and prototyping tools.

Demonstration and Claimsmaking

#BikeShareHackTO organizers used contest categories as means to highlight the demonstrative function of the produced technologies that came out of the hackathon. The organizers structured prizes around two categories called “The Beauty” and “The Beast”:

**Category 1: The Beast**
This is the award for technical prowess, a humming buzzing thing of wonder, ready for use on Sunday evening. This is the submission that people will read about, use and see after the event. This submission will have people saying "I GET IT NOW! THIS IS WHAT CIVIC HACKING CAN DO!"
Category 2: The Beauty
This is the award for the futurist, the visionary, the designer and the dreamer. This award will show "what could be" and create a hunger for someone to take the prototype and make it real. The more functional the better by Sunday night, but there is a bit more room to breathe on the guts of this one.

One strategic outcome was to diversify the open data exemplars that came from the event. Two very different projects were spotlighted in the final judging. “The Beast” award would go to Bike Finder, an SMS service that allows cell phone users to find nearby available Bike Share bikes by texting to a phone number the names of street intersections. This project was lauded due to its advanced level of technical and potential for market development. As one tech-minded judge explained to me: “The dev work on it was very high level. It was basically ready to launch”. Beyond strong software development, the project team also benefited from members holding user design and marketing expertise. The BikeFinder team presented to judges, along with code, a marketing strategy – showing judges a commitment to pushing the project forward after the event. Though not an app per se, Bike Finder served as a classic hackathon exemplar: an easy-to-grasp service to represent to consumer publics, journalists, and developer communities the promise of data-driven innovation. The project team would promote Bike Finder over the next few months, through social media and in various public spaces, helping to further disseminate open data narratives simultaneously. Meanwhile, “The Beauty” award went to an exemplar less commonly celebrated at hackathons: a data analysis. This group developed an R-based statistical algorithm to produce a user demand model out of Bike Share data to better predict bike redistribution at city docks. This was an exemplar not easily marketable to broader publics, but one that would have more direct appeal to city staff and was similarly demonstrated to government workers at a later event.

Outcomes

Most developer participants I spoke with, in the event’s aftermath, considered #BikeShareHackTO to be a successful hackathon. In particular, developers stressed both the well-organized work infrastructure that facilitated the production of a strong series of apps and tool designs. Beyond the dissemination of social media posts via Twitter, the event also received mainstream media coverage in the form of an article on the local MetroNews.Ca website. However, it remains questionable to what degree the event led to forging lasting ties among developers and other political actors in the city. Beyond the absence of strong non-tech cycling contingent, the event also did not feature strong political or policy-focused discussions around open data or cycling. One community activist remarked to me that he was disappointed that more cycling discussion and debate did not occur during the hackathon and that highly technical concerns with data formats and design took up most of the collective talk at the event. This echoes Lilly Irani’s participant observations of hackathon practice in India and how restrictions of time and emphasis on ‘speed and vision’ limit the capacity for political talk at these events:

…Attempts to familiarize ourselves with the working of government were interwoven with expressions of time anxiety. Someone, most often one of the software engineers, would ask us to sketch a production schedule. How long could we talk about the law? Could we set a limit on the time of debate to assure ourselves that we could produce ‘the demo’? (2015: 15)
Consequently, while #BikeShareHackTO organizers successfully integrated professional motivations for participating and crafted a data infrastructure conducive to designing apps, I would argue it was less successful articulating political issues around open data and crafting shared political identities that might lead to longer-term participation in open data activism and advocacy after the event concluded. In particular, the hierarchical relations of expert work, which privileged software engineering expertise over cycling policy expertise, may have limited broader outcomes for local political mobilization around open data.

**Case Study 2: #Hackgoeson – Expanding the Open Data Room**

*Mobilization and Framing Strategy*

#Hackgoeson was an experimental attempt to foster long-term partnerships, across domains of expertise, in Toronto’s open data advocacy field. The initiative was developed by Bianca Wylie (introduced above) and two others, Richard Pietro, an open government activist, and Bruce Chau, community manager of Microsoft’s local open source initiative. The initiative was designed to mobilize a portion of the two-hundred plus participants at the February 2014 Open Data Day Toronto conference (#ODDTO2014) to help build communal hacking projects, which could demonstrate the utility of open data. The organizers saw #Hackgoeson as an experiment or “leap of faith” in innovating with the hackathon template by mobilizing actors through sustained civic hacking projects. The organizers broke from conventional hackathon practice by not staging a developer-centric contest or using prizes as incentives. Nor did they specify a challenge or dataset for participants to target. Rather, the initiative employed a very loose collaborative structure, which left problem definition and data design largely to be resolved through the collective dialogue and work of #Hackgoeson participants themselves. Moreover, the event was not bounded by a common two to three day timeframe, but was designed to enable projects that could last several months. Organizers promised extended support, beyond an initial weekend, for communal hacking projects. This support comprised organizational assistance (e.g. arranging lab space, communication, publicity, and food supplies), expertise related to data and policy process, and other resources made available through the organizers networks, including contacts to developers, government data managers, and policy actors. As Chau explained it, “the goal is to make a hackathon model that is sustainable”.

The initiative framed itself around a tripartite conception of Toronto’s “open data ecosystem” involving three categorical groups: government staff as “data owners”, programmers and designers as “data transformers”, and community advocates as “problem owners”. The organizers took on the role of “connectors” or “brokers” to facilitate linkages between diverse actors who held interest in data-driven problem solving. The organizers recruited five Toronto community advocates to represent “problem owners”. These advocates spoke at #ODDTO2014 and described policy challenges that might be targeted with open data. Issues included: city budgeting, affordable housing, disability accessibility, education policy, and cycling safety. Integrating policy advocates into Toronto’s open data advocacy field was a key mobilization objective. The organizers wanted to get non-technology people “into the open data room”. Some of the recruited problem owners had little familiarity with open data. Wylie explained how they were brought in:
You have to make this open data thing make sense to them. These are groups who do a lot advocacy and activist work...They already have 95 things to do...Convincing advocates to be a problem owner really kind of came down to this good faith thing. I just had to say - 'This is a good idea. Come do it, come do this. Because it could potentially support your work and the [Toronto open data] community needs you guys.' I think that’s the reality of it all: our community needs the activists more than they need us. [RS 9]

As with #BikeShareHackTO, the event was similarly designed to frame policy domains within the context of open data and link diverse interests to a shared concern with data-informed policymaking in the city. However, whereas the participation of cycling advocates at #BikeShareHackTO was largely framed passively as an audience who could learn about open data by observing developers at work, in stressing the role of “problem owners”, #Hackgoeson organizers sought to create equal space for community advocates to better inform and inspire data professionals. The opening talks of these two events present an interesting contrast in the framing of open data and expert participation. At #Hackgoeson, the problem owner talks provided a basis for community advocates to establish their own expertise as important to informing open data hacking activism. To get a sense of problem owner talks, here is a snippet of what was said the affordable housing advocate:

I do a lot of work asking Social Planning Toronto and other organizations in the city about housing, getting them essentially to teach me about the housing stock that we have in Toronto...So why do we want to talk about housing?...Well, why don’t we want to talk about housing? I think one of the reasons we don’t talk about housing is because we’re faced with these huge abstract numbers and ideas around Toronto’s public housing stock. So we hear that’s there is x hundred thousand people on the waiting list, we hear the repair backlog is x hundreds of millions of dollars. These numbers sound big and abstract and overwhelming so it’s hard for people to engage on that front. [People] still care about the issue, they just don’t have more concrete information...Social Planning wants to know how many people get evicted from their apartments in Toronto...That data is not available unless you request it. We have [data on] eviction orders, but that doesn’t tell us the whole story about how many people are actually losing their housing...How many people do get evicted from their apartments in Toronto? And can that data be shared without requesting it on a case-by-case basis?

The emphasis on policy knowledge at #Hackgoeson helped served to reframe jurisdictional ownership of open data work as one that belonged to both “techies” and “non-techies” alike. This can be contrasted with the basic absence of policy discussion at #BikeShareHackTO, which framed the problem at hand as using programming skill “to get more people on bikes” with data. Notably, the initial presentations at #BikeShareHackTO further emphasized an expert hierarchy. A YouTube video by the author Douglas Rushkoff helped conveyed programming skill as an essential political agency. A portion of the video text is as follows:

In a digital age, or in any age for that matter, who ever holds the keys to programming, ends up building the reality in which the rest of us live. Thanks to these technologies, we have the ability to remake our economy, our education, our government, even our religions. If we don’t seize the opportunity to remake our world, I promise you something or someone else will do it for us – PROGRAM OR BE PROGRAMMED!

1 https://www.youtube.com/watch?v=kgicuytCkoY
While the opening talks at #BikeShareHackTO also included city staff discussing Bike Share operations, the conversation largely concerned technical data collection and measurement processes as opposed to highlighting, say, how data helps shape policymaking processes or articulating current policy debates involving Toronto’s Bike Share program. In the #Hackgoeson problem owner talks, there was less “tech talk” around the hows of open data and more emphasis on the whys in terms of discernable impacts for local policy communities. In sum, the mobilization and framing strategy adopted by #Hackgoeson organizers tried to decenter coding expertise and provide a setting where interdisciplinary relations could be crafted through collaborative hacking. This led to a diversity of occupational backgrounds represented among participants at #Hackgoeson, including several participants with no coding skill whatsoever.

After problem owners gave their talks, #Hackgoeson organizers invited participants to form groups and devise data-based projects around the problem talks or devise their own problems to tackle. About thirty participants came forth. They gathered round at tables, in corners of the room loosely quartered off, and used markers and paper pads to brainstorm project ideas. The organizers gave no directives as to what groups the participants should join. Of the five problem areas presented, only affordable housing attracted a lasting group, though it happened to be the largest, with close to twenty initial participants volunteering to support a data-driven project². A second group, the smallest, had three participants and devised their own project on city planning data. A third team formed around transit data and had about eight initial members. These groups worked in a shared space over the weekend and then, over four months, reconvened several times, sometimes separately, but on five occasions collectively in a computer lab.

Divisions of Work (or a Tyranny of Structurelessness)

In hopes of capturing a spirit of “creative whimsy” apparent at other hackathons, the organizers of #Hackgoeson wanted the collaborative process to unfold organically. This meant letting groups “brainstorm” their own open data projects and for participants to create their own roles and tasks in undertaking them. This had both positive and negative outcomes. As a positive, it allowed for experimentation and deliberation among the participants. Especially in #Hackgoeson’s first few days, the playfulness and unstructured exploration of both data and policy issues, related to group problem domains, enabled fruitful discoveries. For instance, in the affordable housing group, early group work was devoted to identifying available housing data and mapping locations of buildings owned by the public Toronto Community Housing Commission. A minor task, but it allowed participants to discover new visualization tools and think about new possibilities in articulating policy-focused stories through data. The looseness of structure led to a generally positive and fun atmosphere in the first days of #Hackgoeson and participants fed off a DIY-spirit of creative tinkering and dialogue about data, without any pressing need to have an app ready by the end of the initial weekend. However, as the initiative settled into its first week and participants returned the next Saturday, that same looseness created issues for groups in crafting committed attachment to the working projects.

This was immediately apparent in the transit data group, as only one member from the original team of eight showed up on the second Saturday. Notably, the individual who arrived expressed little political interest in Toronto transit issues, but wanted to partake to practice
and refine his design skills. That group’s participation would improve, as members of a local transit advocacy organization returned at later #Hackgoeson sessions. But the lack of common attachment to projects, combined with a relatively unstructured work design, ultimately spelled doom for each of the #Hackgoeson projects in terms of substantive productive ends. The motivations of participants came in two ideal kinds: political and professional. Participants more politically motivated held ties to open data issues or specific policy issues at hand. Participants more professionally motivated primarily wanted to creatively employ their own expert skillset or learn new skills. A tension I observed throughout #Hackgoeson was that while politically motivated participants were seemingly comfortable in engaging in lengthy group problem discussion and taking detours on their respective data projects, professionally motivated actors were much more keen on productively working and completing narrowly defined problem-solving tasks. This led to a conundrum. When projects started to meander, and there was “too much talk”, professionally motivated participants would drop off and fail to show up at later sessions. However, with insufficient professional support, politically-motivated participants often could not advance their data projects. This cycle was most prevalent among the transit data group where, at every session, the project had to be rebuilt, essentially from scratch, as new hackers came in and out of the group. The two other groups faced similar conundrums, albeit in different ways. The three-person city planning project stalled out as the technical lead, a new parent, found less and less time to devote to a long-term project. The very large affordable housing group was the most successful in riding out participants coming and going, in no small part to the facilitation skills of Wylie, whose consistent documentation allowed hackers who joined at later sessions to be quickly updated on project tasks.

Work divisions also came to ahead in the form of project design. In the affordable housing group, some developers became irritated when non-developers advocated for technically unfeasible project designs. That irritation was compounded when non-developers would challenge and ask for detailed explanation as to why their design was unreasonable. Similarly, some developers felt unfairly tasked with hours of coding work while receiving little recognition from the non-devs who seemingly spent their idle. As one participant remarked to me, it seemed that non-devs “did not know what to do with their time". Another issue, which occurred in the transit data group, involved politicizing the project itself. Members of the transit advocacy group initially wanted a data visualization to specifically call out and critique certain Toronto city council members for inadequately funding local public transit. However, the technical lead on the project was uncomfortable in creating such a politicized visualization, as he did not share the same political beliefs and believed it not to be the best use of his skills. He instead suggested a data visualization that neutrally marketed the appeal of public transit use by promoting “little known stats" such as the ethnic diversity of Toronto’s public transit ridership. The transit advocates were left unsatisfied by the proposal.

But perhaps the biggest problem of loose arrangement of roles between participants was that it did not erase expert hierarchies among the group, but merely made them more implicit and led to a certain “tyranny of structurelessness" (c.f. Freeman 1973). Because #Hackgoeson still emphasized “hacking" as its core activity, there was a consistent push to get away from problem discussion and move to technical blueprinting, programming, and using data as quickly as possible so to make use of the developer skills in the room. This meant giving short shrift to researching complex policy issues at base of group projects. The core questions in group discussions often came back to “is this technically feasible?” and “is there data to do this?” as opposed to “does this actually help the policy context?”
The implicit tyranny of developer expertise ultimately became the Achilles heel for the affordable housing project (the most promising project of the three). Within that project, participants spent many early hours brainstorming, researching, and blueprinting a useable open data tool for tenants to help speed up repair processes and help reduce the publicized $860 million Toronto Community Housing repair backlog. The proposed tool was to use anonymized repair request data from TCHC to create an interface that would allow tenants and housing advocates to easily analyze and compare the duration of tenant repair requests completed by TCHC management. The idea was for the open data tool to create new leverage for tenants and advocates in by making repair process more transparent and accountable (in the mode of the popular SeeClickFix app). However, a month into the project, after the group consulted with a tenant rights about their they decided to scrap that initiative. The tenant advocate’s assessment of the proposed tool was not a positive one, as he pointed out that the proposed tool ignored some essential policy questions, for instance, that the issue of the $860 million repair backlog did not lie in bureaucratic inefficiencies as much as with the age of Toronto’s social housing stock and that TCHC’s repair practices were rational and cost-effective given their current funding constraints. He strongly argued that the proposed tool would have negligible impact for tenants and proposed that a better path would be to gather data on the housing stock itself to inform tenant about TCHC’s housing replacement strategy. Confronting entrenched policy realities and complexities became was a recurrent event for the affordable housing group and led to project fatigue as participants realized they needed to better more informed about Toronto’s social housing policy context before moving into tool building. As Wylie summarized: “What do we hold in our hands from this whole experience? Nothing functional and a whole lot of learning…”

[SECTION TO BE ADDED]

CONCLUSION

In summary, this paper has aimed to situate hackathons as a repertoire of strategic claims-making and mobilization in fields of open data advocacy. This paper has briefly attempted to historicize the emergence of hackathons with open data advocacy and has questioned Silicon Valley innovation narratives that have become synonymous with its form. I’ve highlighted how hackathons are strategically used to frame issue domains in the context of open data and diffuse claims to outside audiences. Moreover, drawing from empirical evidence, I’ve has suggested that overlap between the political and professional contexts of these events creates key tensions for organizers to resolve in terms of employing them for mobilization and advocacy purposes. Future research would benefit from further examining the interstitial position and strategic use of hackathons as operating across diverse political and professional fields of open data activity.
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