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Hackathon: Delhi, 2012

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Abstract: Hackathons are a practice of planning, rendered experimental, emergent, and probabilistic, if planning is a practice of anticipating and producing representations of possible futures. Private firms, public institutions, and civil society organizations have taken up hackathons as a way of engaging publics in prototyping possible futures. I argue that hackathons are an instrument of planning by trial-and-demo; trials probe the interests of possible investors of labor, funding, and partnership to carry projects forward. These hackathons train participants to see austerity as an opportunity and technical challenge rather than a political circumstance.

Introduction

Hackathon organizers invite programmers, designers, and others with relevant skills to spend one to three days addressing an issue by programming and prototypes. Organizers offer a space, power, wireless internet, and often food. Participants bring their computers, their production skills, and their undivided attention. Participants form work groups, explore ways to address the focal theme, and push towards a ‘demo’ – a piece of software that supports storytelling around future technologies and use. At the end of a hackathon, those who managed to build demos might show them off and speculate about their futures with judges or conference goers. These demos were subject less to the question of “will this work” than “*could* this work.” And they stood as proof of the capacities of the entrepreneurial team as much as, or even more

than, the probability of the proposed solution.¹ After the hackathon, the team might promise to continue the work, or might just shake hands and say goodbye.

These hackathons were organizational devices to invite participants into exploratory, experimental planning. Facebook and the Gates Foundation, for example, hosted a hackathon to call on volunteers to build education applications atop Facebook's computing infrastructures. Facebook's plan was to grow its revenue streams and render itself indispensable to human social relations; BMGF's plan was to develop silver bullet interventions through "creative capitalism." How those plans would be accomplished — and how they could be accomplished with public legitimacy — was utterly unclear. The hackathon allowed Gates and Facebook to invite participants to dream education in the form of apps; by emphasizing voluntarism and personal agency, the events downplayed the terms of inclusion and the long term planning horizons those terms served. Other organizations that elicited voluntaristic hacking included the World Bank and Infosys, an Indian IT service company. Their hackathon challenged volunteers to code demos to address "global sanitation" problems. More recently, the Government of India has offered up education data sets at an OpenEducation AI hackathon sponsored by IBM, Amazon Web Services, Google, and Indian education startups (OpenEd.ai 2017). Media scholar Sandeep Mertia has studied a range of hackathons in Delhi that open up "smart cities" planning and produce an emergent, new kind of expert — the "civic data scientist" (Mertia 2017). Hackathons

¹ Smith (2009) characterizes demos in information technology cultures as a way of telling polyvalent stories about use, locating demos in a tradition of scientific demonstration. In cultures of entrepreneurialism, investors and workers commonly assume that projects will change or "pivot" as market conditions change. Thus, demos are as much about signaling the capacity of the demo builders as they are about selling the technical solution itself.

proliferate as a space that allow firms to explore hires, investment, and ideas that might not otherwise readily emerge within the culture of a firm. Hackathons enable governments and corporations to expand their networks of partners, their imagination of plans, their public legitimacy, and their influence of public imagination.²

How did hackathons become an instrument of Indian development planning? Though hackathons seemed a global phenomenon, its function in Delhi could not be read as identical to one in Silicon Valley, though it drew its legitimacy from there.

Postcolonial Developments: From Five Year Plans to Managed Speculation

Delhi at the time of my fieldwork seemed a development boomtown. Planning had given way to speculation; public sector companies and projects had largely given way to public-private partnerships expected to yield profit for investors.

Since before independence, Delhi has been a center of development planning and calculation to modernize Nehru's "needy nation."³ The Planning Commission, or Yojana Bhavan, produced Five Year Plans to model the nation as an economic system, plotting inputs and outputs, targets and controls. The Commission employed statisticians, planners, and economists as technocratic experts who set bounds on and goals for India's private and public sector, away from the

² Hackathons can also have other purposes. In open source cultures, they functioned as a site of joyful coding and copresent code maintenance (Coleman). They can also become sites where publics critique technical infrastructures by hacking a system, or a public pooling of archival labor (Muehlenbach 2017).

³ Roy 2007

“squabbles and conflicts of politics” to express the rational will and consciousness of a unitary nation.⁴ Political economist Kalyan Sanyal characterized this state as an agent of “planned accumulation”: “the task of the state was the promotion of capital formation by engaging in development planning, that is, by designing, implementing, and monitoring plans for the expansion of the modern industry.”⁵

After liberalization, five-year plans gave way to market governance to facilitate the movement of capital investment and the growth of public-private partnerships.⁶ The central government privatized national industries and exposed domestic capitalists to competition from foreign corporations. Some elites chafed at the changes; the state and high-tech capital’s advocates rebuked that India’s entrepreneurs were ready to compete globally without the protections offered by import substitution policies.⁷ While domestic elites chafed at the changes, high-tech capital pushed for them.⁸ Five-year plans began calling on India’s “entrepreneurs” to step into the void as providers of products, services, and infrastructures. Private sector consultants rotated through World Bank and public-sector posts. Planning no longer resided securely in the state.⁹ Over two decades, the Planning Commission moved from a language of planning to one of “enabling” — a commission that, following World Bank guidelines, minimized state

⁴ Partha Chatterjee, *The Nation and Its Fragments: Colonial and Postcolonial Histories* (Princeton University Press Princeton, 1993).

⁵ Kalyan K Sanyal, *Rethinking Capitalist Development: Primitive Accumulation, Governmentality and Post-Colonial Capitalism* (London; New York: Routledge, 2007), 170.

⁶ Stuart Corbridge and John Harriss, *Reinventing India: Liberalization, Hindu Nationalism, and Popular Democracy* (Cambridge, UK; Malden, MA: Polity ; Blackwell Publishers, 2000), 120.

⁷ Latha Varadarajan, *The Domestic Abroad: Diasporas in International Relations* (New York: Oxford University Press, 2010).

⁸ Stanley A. Kochanek, “The Transformation of Interest Politics in India,” *Pacific Affairs* 68, no. 4 (1995): 529–50, <https://doi.org/10.2307/2761275>.

⁹ Historian David Ludden argued that as states have lost their disciplining power to markets, they have lost their leadership role in development as well (Ludden 2005:4048). Territorial

intervention, allowed market institutions to distribute resources, and acted as a check on excesses.¹⁰

The enabling state opened a range of opportunities for private actors to experiment with development. Chief Ministers of Indian states shuttled to global cities to sell investors on economic zones and development projects. By 2004, Goldman Sachs directed global investors to the potential of emerging markets in Brazil, Russia, India, and China. Michigan business school professor CK Prahalad sparked a wave of private sector interest in developing products and services for the poor with his book *The Fortune at the Bottom of the Pyramid* (2006). The 2013 Companies Act mandated that large companies donate 2% of their net profits to corporate social responsibility (CSR) projects, including non-profit health, education, housing and welfare initiatives as well as technology incubators.¹¹ These CSR laws were one way the state and India's wealthiest industrialists compromised to restore the legitimacy of companies in a decade of increasing inequality (Kohli 2012).

These shifts generated a wave of investment in development ventures, by Indian nationals and expatriates alike. Indian development had become an economic opportunity, not just a responsibility, obligation, or national task.

As the government shifted from controlling industry to enabling it, it required a new legitimating discourse. Entrepreneurship allowed elites to narrate every Indian not as a mouth to feed, but a

boundaries no longer define the “participants, populations, and priorities” in the development process (Ludden 2005:4048).

¹⁰ *11th Five Year Plan*, vol. 1 (New Delhi: Oxford University Press, 2007), 223-224.

¹¹ Ekta Bahl, “An Overview of CSR Rules under Companies Act, 2013,” *Business Standard India*, March 10, 2014, http://www.business-standard.com/article/companies/an-overview-of-csr-rules-under-companies-act-2013-114031000385_1.html.

potential leader of enterprising development. At the 2011 World Economic Forum, more commonly known as Davos, the CEO of one of India's largest banks discussed "India's Inclusive Growth Imperative" with representatives from Amnesty International, the IMF, the press, and the Government of India. Beyond the glittering dinners and expert panels, news of political unrest haunted the conference – from protesting farmers in West Bengal to the revolutions of the Arab Spring. "How do we share the growth?" the banker, Kocchar, asked, referring to the India's growing income inequality. She offered a proliferation of public-private partnerships as a solution. "In India, it is the entrepreneurial spirit that has contributed to a lot of growth," Kocchar announced. „How can PPP [Public-Private Partnership] work together in every field? Health? Education? Expanding the sources of employment? *It [development] is a responsibility for everybody and an opportunity for everybody.*"¹²

A responsibility for everybody. An opportunity for everyone. Planning and development was no longer the duty of a state to the people who put it in power. It was a diffuse opportunity for entrepreneurial citizens to enrich themselves while caring for the social body.¹³ In 2015, Narendra Modi closed India's venerable Planning Commission. In its place, he announced NITI Aayog would act like a "think tank" to support an "entrepreneurial ecosystem." The move formalized a shift long underway in liberalizing India. We were all postcolonial planners now.

¹² *India@Davos: Batting for Inclusive Growth*, accessed October 21, 2017, <https://www.ndtv.com/video/news/the-big-fight/india-davos-batting-for-inclusive-growth-189493>.

¹³ Lilly Irani. *Innovators and their Others* (Princeton, NJ: Princeton University Press, forthcoming)

“Hacking for Change” from the Design Studio

I spent fourteen months with one group of middle-class Indians who answered this call, leaving jobs in Indian and multinational corporations to form an innovation consultancy I will call DevDesign. Their projects typically entailed ethnographic research, design, and planning for products and services for “the bottom of the pyramid” — water filters, community toilets, or digital learning platforms, for example. They did those projects planning futures for multinational philanthropies, NGOs, and corporations, sometimes even working with the Indian municipal or central government officials. They put significant work into turning other Indians on to a more socially concerned forms of enterprise. They supported cowork spaces. They staged popup photography shows on the streets. They staged an annual conference that gathered workshops in arts, non-profit management, social marketing, and design. These were the varied forms of knowledge needed to plan for a neoliberalizing community and nation, from culture, to technology, to business model.

DevDesign staged the hackathon as part of a festival celebrating design, development, entrepreneurship. The hackathon was one of a set of workshops where fellows — accepted applicants — worked on short term projects with NGOs, theater groups, and urban planners.

The first morning of the hackathon, I ambled into the studio at 9am and the studio cook placed biscuits and small cups of black tea on the glass conference table. I knew Vipin, the convener, and Prem, an acquaintance I had invited to join the hackathon. Two other young men — engineers at the same consultancy in Bangalore — arrived together. Three others included a designer from Pune, a software engineer from Gurgaon, and designer from London; all but the last were Indian. Vipin started the conversation by asking why we had volunteered to spend five

days at the studio hacking for “open governance” — the theme of the hackathon — with people we mostly did not know.

Dev, a young web developer from Bangalore, explained that he wanted to see if he could improve the functioning of the Indian state. He explained that with “all the complaining” he heard about how the government “doesn't work,” he saw this as “a chance to see if we can make a difference.” Nikhil, an ex-startup founder turned software consultant, wanted to introduce government officials to the virtues of technology design more generally: “This could be just jamming the door. Getting the technology in. Ease their lives a bit with technology. So then in the future, even if it is not [this demo], they'll be more receptive [to other technology initiatives].” For Prem, a Marxist legal anthropologist, the world of software production promised a more immediate and direct way to make social change than was available to him in his writing. Prem also on his fieldwork on land rights activism among landless people in Uttar Pradesh as a source of insight into the design problem. Krish, another software consultant, spent his free time reading Donna Haraway, Rosi Braidotti, and painting. He had bicycled across western India and recounted those experiences as we debated potential purposes for the software.

None of us imagined the software seeds we would build here as a source of profit. Vipin hoped that he could get a philanthropic grant so he, Krish, and Nikhil might take a salary for building out the system after the hackathon. I had been part of a volunteer run software project for years. If the software could generate income to sustain its operation, that would be great but remunerative futures were multiple and none of them paid very well. They fit, however, alongside a dense and vast complex of NGOs and social enterprises that worked along with the Indian state to organize and care for India’s dispossessed (Sanyal 2007). I note this because analysts who explain the drive for innovation as the hegemony of neoliberalism miss the ways

that participants in these projects may not subscribe to an economized or market-exchange mediated vision of the social. Few of us at the hackathon thought about our work in economized terms. The CSR sector, its networks of NGOs, and corporations and philanthropists who funded and sustained them relied on our varied politics to ameliorate dispossession as long as we did not fight capitalist dynamics systemically or too vigorously.¹⁴ The power of the hackathon, then, was that it invited us to translate our political hope into technical and speculative planning labor — labor that produced experimental plans and vehicles for investment by the for profit or non-profit sector.

We had 5 days to create the demo. The discipline of the demo forced us to orient to planning as a process of pragmatic compromise and working with already extant resources, relationships, and infrastructures.

We began by familiarizing ourselves with the domain. Vipin had recruited a friend at Parliamentary Research Service who guided us towards Parliamentary standing committees as a site where we could inform legal deliberation through the software we would design. Most of us had experience making software, but few of us had knowledge of legal process. We read through and critiqued a recent Road Safety Bill draft to put ourselves in the shoes of possible law-reading users. We learned about parliamentary procedures. Vipin pushed a stack of books on “Open Government” and e-Government, exclusively based on American case studies, to me and told me to skim for anything “that interested” me.

¹⁴ Kalyan Sanyal (2007) argues that an assemblage of NGOs and international agencies care for the populations rendered surplus by capitalist disposessions — the vast informal sector — as a way of maintaining the legitimacy of postcolonial capitalism among the masses rendered surplus by it.

These activities 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 scope the time of debate to assure ourselves that we could produce ‘the demo’? As we negotiated milestone deadlines, Vipin pushed post it notes around the board representing the time line leading up to the festival. This collective visualization of time forced us to work backwards from the demo, bounding the time to build components, preceded by negotiating what we could do that we wanted to do, preceded by where we were now – understanding anything about the problem to begin with.

Fairly quickly, major differences emerged in how Prem and Vipin understood politics to work. Vipin expressed technocratic fantasies of a website that could link dispersed Indian experts with state planners and politicians — a kind of Quora for the development state, as he described it. Vipin saw the law as a kind of code that set incentives through punishment; fix the law, fix the nation. Prem, on the other hand, had studied the implementation of the Forest Rights Act and told stories of how the law moved through activists, district officials, and landless adivasis on the ground. The law as text was little match for the contingencies and power plays in which it was invoked. Prem, and many of us with him, did not share Vipin’s faith in elite experts in substituting for the politics of the poor.

These tensions led Prem and Vipin into a heated debate and many of us sided with Prem. Working with and through Prem’s ethnographic cases, our interactions that followed were peppered with the subjunctive: “what you could do” and “what if we.” Taking advantage of Vipin’s absence for a few hours, we developed a concept called Jan Sabha, inspired by the Jan Lokpal, that would allow organizers to document face-to-face deliberations of poorer constituencies around central government issues. The hackathon, it seemed, could accommodate

a more leftist politics. But, Prem warned us, it would require “some REAL footwork” to get “on the street” and work with existing organizations thinking in terms of political participation. As the sun sank deeper in the sky, we realized we had little time to reach out to NGOs or activist networks. We had little time to understand their information practices or to build trust with them. We could not even promise maintenance of any demo that came out of a potential collaboration.

That week, we weren’t on the street. We were in the studio. The time, tools, and skills in the room were geared towards prototype work, not “footwork.” Even the kinds of prototype work we could undertake was limited by the political economies of internet production in a country where few had direct access to the internet. Krish, a software engineer, explained to us that in the long term, the project could get into rural areas through interactive voice response phone systems, rural kiosks, or SMS based systems. “In Andhra, there’s a women’s radio station,” he told us, “The scope of what we want to envision is THAT. What we implement in five days is probably a website.” The skills in the room were of the web; web tools were those most at hand for urgent hacking. He continued, “So we’re going to go to a conversation where we’ll chop off everything. Cut. Cut. Cut. Cut. But if there’s a master document that accompanying this chopped up little thing...” he trailed off. Learning to demo was learning to work with the infrastructures that were already there. In the urgency of the hackathon, we could not invest in creating new infrastructures, maintaining old ones, or contesting the forms of the infrastructures that supported and disciplined our futures. Those plans and pitches which were out of bounds were accused of being “unviable.”

The hackathon, then, was more than a way of bringing civil society into processes of planning. The hackathon also manufactured urgency to squeeze planning into a set of pitches – tests to see which futures could attract public, private, or personal investments. This urgency

crowded deliberation in favor of inspiration; it privileged tacit knowledge and prior expertise over stretching one's matters of concern or care. In expert discourses of business management and high-tech production, this urgent, experimental attitude was called "a bias to action." This is not just my description, but an actor's category originating in McKinsey consultants Peters and Watermans' work on how to manage corporations in the face of the failures of rational, predictive, linear models. The world, they argued, was one of complexity and rapid change. They advised that managers ought to quickly research, implement, experiment, and learn rather than run into "analysis paralysis." The "bias to action" they advised made it into job postings not only for the Delhi design studio, but even for Google. It was a central temporal-emotional ethos of innovation.

More than regime of being-in-time, champions of "the bias to action" elevated it above other figures of democracy and planning. In joking moments, entrepreneurial Indians mocked other kinds of Indians: overly intellectual Malayali men who could find "six sides to a cube," Bengali men in *adda* satisfied to talk deeply, or academics who attuned to political dilemmas over action. Collaborative design meant getting input from many kinds of people, but not letting the project run aground over the political. Planning, for these middle-class Indians, ought not be about long deliberations, extensive consultations, and resourceful investments in execution. In entrepreneurial form, as in the hackathon, planning had become a set of experiments, generated from social and tacit knowledge and ideologies, and subjected to processes of editing and selection. Hackathons were instruments of planning rendered entrepreneurial.

The form of innovation we practiced in the hackathon was more Schumpeterian than Edisonian. Historian Thomas Hughes famously called Edison a heterogeneous engineer — someone who not only invented a lightbulb, but had to generate an entire an infrastructure of electrical

production, transmission standards, and power lines around the technology.¹⁵ Hackathons, instead, presumed the world was full of infrastructure and the challenge was to articulate technologies that could ride those rails to create new kinds of value. These infrastructures were those forged with the growth of the internet, first under militarized internet research, then corporate telecommunications research, and then the open source communities and internet industries that flourished across the US and Europe.¹⁶ These infrastructures, in other words, accreted through the investments and for the needs of US and European technological use. This Delhi hackathon, like many others, encouraged participants to find use values for these infrastructures in other parts of the world. This was economist Josef Schumpeter's vision of the entrepreneur – the one who found new arrangements of existing resources, relationships, and techniques to organize novel forms of production. They did not necessarily labor, manage, or maintain. They made novel combinations out of existing skills, labor, and techniques.

¹⁵ Thomas P. Hughes and others, "The Evolution of Large Technological Systems," in *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, 1987, 51–82.

¹⁶ Janet Abbate, *Inventing the Internet* (Cambridge, MA: MIT press, 2000).

Hackathons and Postcolonial Speculation



I spotted a Rolex ad in the Economist in 2013. It promises that “anyone can change everything.”

The anyones are, crucially, people of color rather than familiar white saviors. Social enterprise promises a world without poles, where global south elites can be presented as grassroots, south-south achievement. Colonial anthropologists worked for companies or states to produce knowledge about difference in service of governmentality and extraction (Philip 2004).

Knowledge constructing tradition, caste, and tribe, for example, helped render “terra incognita” navigable, exploitable, and governable. Today, entrepreneurs appeal to a wider set of patrons – financiers, philanthropies, government agencies, and companies. They too draw on applied anthropology and resource maps. But they also search themselves, their communities, and their resources to construct opportunity. Julia Elyachar argues that the idea of the “Bottom of the Pyramid” as a source of innovation, or “next practices,” emerges in part out of critiques of

development as universal, top-down expertise.¹⁷ Entrepreneurs – in this case, children of India’s governing classes – appear as another postcolonial resolution, pitching development from the middle-class up. Elided in the promise of this connected world of changemakers are the relations of exploitation — colonization, labor exploitation, resource extraction, and its newer extractive formations — that make certain plans “viable” and certain populations the named objects of care. These practices of planning as hacking and experiment direct attention away from the social relations, material resources, agendas that make certain forms of transformation more imaginable and more viable in the manufactured urgency of entrepreneurial time. Though “anyone,” the ad tells us, can change “anything,” the flexible skills of pitching, prototyping, and “what if” talk are new markers and practices that divide the modern and backwards, governing and governed, in entrepreneurial, experimental, investable form.

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¹⁷ Julia Elyachar, “Next Practices: Knowledge, Infrastructure, and Public Goods at the Bottom of the Pyramid,” *Public Culture* 24, no. 1 66 (2012): 109–129.

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