

Narrativity, Audience, Legitimacy: Data Practices of Community Organizers

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Community organizers build grassroots power and collective voice in communities that are structurally marginalized in representative democracy, particularly in minoritized communities. Our project explores how self-identified community organizers use the narrative potentials of data to navigate the promises of data activism and the simultaneous risks posed to working-class communities of color by data-intensive technologies. Our nine respondents consistently named the material, financial, intellectual, and affective demands of data work, as well as the provisional, tenuous possibility of accomplishing movement work via narratives bolstered by data. Our early results identified two important factors in community organizers' assessment of the efficacy and political potential of narratives built with data: audience and legitimacy.

CCS Concepts: • **Human-centered computing** → **Empirical studies in HCI**;

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1 INTRODUCTION

Recent, historic, widespread public protests in the United States regarding police killings of civilians demonstrate the importance of community organizing, a form of grassroots activism dedicated to building voice and political power within communities facing consequences of structural oppression [28]. While organizing is a general technique of democratic activity common to every conceivable walk of American political life (e.g., labor unions, major and minor political parties, private interest groups, ethnic or religious organizations, civic groups), community organizing represents a more specific focus on building power in communities that are frequently marginalized in representative governance, particularly minoritized communities. Like many other kinds of political actors, community organizers pursue larger social movement goals via electoral politics [26], but they also frequently act through protest, coalition building, lawsuits, and community education. Community organizers share an approach to democratic participation, a professional culture, and many job-specific tools and techniques. Community organizers working with or in service to minoritized communities also make extensive use of a less obvious political tool: data. Like other kinds of data professionals, they create, aggregate, and visualize data in order to inform organizational activities, agitate for policy, and drive public opinion. Paradoxically, they also frequently criticize via their work the design, development, and use of data-intensive technologies in a variety of domains, including law enforcement, public education, public health, and

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pandemic response [9, 14, 35]. Our ongoing project explores how community organizers navigate the promise of data as a tool for political change and the simultaneous risks posed to working class communities of color by data-intensive technologies.

While community activism, civic participation, and nonprofit organizations have been a focus of HCI [1–3, 5, 22], community organizers in particular have not been widely studied in social computing research. Community organizing refers to “grassroots efforts defined and guided by the constituency living with the problems being addressed” [40]. It is a general technique of social change and political action, not a political orientation: community organizers work in all parts of the American political spectrum [16]. Community organizing as a philosophy does not concede that there exists an independent consensus in the community that can be learned or accessed by researchers; instead, community organizing is about shaping community will through education, reflection, and political activity [35].

A recent work on labor organizers found that professionals working towards explicitly political ends tended to use off-the-shelf data tools; a relatively small and influential subset of political data workers had valuable specialized skills and technical competence [20]. These authors used the term *data practices* to emphasize the “uneasy discrepancy between the promises of becoming data-driven” and the practical application of data tools to politically motivated work in organizational settings. One of the few works on data practices of community organizers argued that research in this area has tended to focus exclusively on communicative strategies for public messaging (such as the use of hashtags on social media) and misunderstood the larger racial justice context of such work [36].

This late-breaking work centers the data practices of community organizers. We present findings from interviews with self-identified community organizers who are located in different regions of the US and focused on disparate issues, including economic justice, police abolition, public health, and immigrants’ rights. Respondents consistently emphasized the varied demands of their work, both in terms of the logistics of dealing with resource constraints and the more philosophical struggles of implementing broad societal goals in professional practice. Respondents also emphasized the material, financial, intellectual, and affective demands of data work (a problematic we explore in Related Work below). Despite these highly variable accounts of the particulars of data practices among community organizers, our early results identified two important factors in community organizers’ description of work with narratives built with data: audience and legitimacy. These initial findings, developed via the inductive coding strategy outlined below, form the basis for our ongoing, interview-based research with community organizers.

This project contributes an exploration of how community organizers navigate the promise of data as a tool for political change and the simultaneous risks posed to working class communities of color by data-intensive technologies. This project will produce the most detailed research on this particular form of computer supported cooperative work yet published by synthesizing novel methods for pandemic-sensitive fieldwork and sociological theories of race and datafication. The larger project delivers meaningful incorporation of minoritized communities in research, design, and education activities related to data activism and social consequence of data-intensive technologies.

2 RELATED WORK

2.1 Data activism

We locate our study within the sociological study of datafication, the increased distribution of networked digital technologies that create, capture, aggregate, analyze, and visualize data and a set of concomitant cultural understandings that turn on the taken-for-granted power of data to produce privileged forms of knowledge [39]. Datafication is of significance to minoritized communities, those communities structurally impacted by hierarchies based on race,

class, gender, sexuality, disability, and other overlapping, co-present identity differentials. As opposed to terms like underrepresented, minority, or underserved, the term *minoritized* draws attention to the historical specificity of American racial and sexual hierarchy in public life [15, 29]. The increased volume, velocity, and variety of digital data have brought data-intensive technologies—to which minoritized communities frequently lack equitable access—into broad use in many critical public and civic domains, including education, criminal justice, and social services [4, 10, 21, 30]. Scholars have found that in these sites of civic import, data-intensive technologies automate and exacerbate inequality [8, 14, 25, 41].

On the other hand, a very different strain of research concerns not the discriminatory or harmful aspects of digital data or data-intensive technologies, but the potential of data to contribute to social change. While activists in minoritized communities have long drawn on quantitative knowledge to argue for desired policies, draw public attention to socioeconomic inequality, and call for institutional change, contemporary community organizers operate amid intensified expectations about the evidentiary and communicative capacities of data. Ironically, these expectations about data are the very same cultural trends that fuel public investments in data-intensive technology. Datafication accompanies historic conditions of inequality in minoritized communities, and itself constitutes a mechanism by which inequality is perpetually reproduced and extended [33].

Amid the ongoing, contradictory, and uneven processes of datafication, activists of different political stripes all over the world have sought to turn the communicative, rhetorical, and affective power of digital data toward desired ends [7]. Researchers have recently advanced the term *data justice* to capture “both the beneficial and negative aspects of data technologies” as datafication unfolds across various domains of sociality [37]. Research in this area has shown that activists take a variety of approaches to working with digital data, approaches which indicate opposing or even incommensurable ideas about what data is, what it can do, and how it might be used to produce knowledge [13]. Community organizers working with data for explicitly political goals must navigate dynamics that might blunt or co-opt their work, including demands for those who are dealing with inequality to provide evidence of harms that they are experiencing and other forms of epistemic burden [31]. These complex dynamics mean that data activism should be understood as a space of conflictual theories and competing values, even within a single project or within a single group. Community organizers engaging in data activism must navigate these conflicts via skillful, deliberate, and considered development of idiosyncratic data practices.

2.2 Data Practices

Data practices, defined in HCI literature as personal, organizational, or institutional uses of digital data that are “situated in time and space, and are dependent on many features of the surrounding material and cultural environment,” figure as both the means by which community organizers do their work and as a frequent subject of contention [23]. Foundational work in the area of data practices focuses on how researchers use data in pursuit of scientific knowledge, including issues related to accessibility, discovery, reuse, preservation and sharing [6, 38]. More recent work has called for exploring how individuals and collectivities respond to and shape processes of datafication as they unfold across various domains of everyday life, including work, school, play, political participation, and other forms of sociality [19]. In the more specific setting of HCI research, recent work has started to focus specifically on understanding how professional political organizers use data to bring “members of the community into spaces of collective negotiation and planning” [20].

Community organizers have developed a variety of data practices to support their work, including creating or reusing data for various community-defined ends; criticizing or even halting specific investments in data-intensive technologies by municipal or state governments; or providing guidance on how organizations can mitigate the risk of harm to minoritized communities posed by particular uses of data. Previous research on datafication and political activism

Table 1. Interview participants

Pseudonym	Location	Context of organizing
Harvey	US South	LGBT rights, food justice, racial justice and police abolition
Aaron	US West Coast	Local governance and accountability
Em	US West Coast	Food & housing justice, emancipation of territories, political prisoners
Zane	US West Coast	Harm reduction for narcotics users, food justice
Bo	US West Coast	Labor rights, racial justice and police abolition
Miranda	US West Coast	Harm reduction for narcotics users, food justice
Polly	US West Coast	Housing justice, digital access
Ricky	US West Coast	Immigration justice, racial justice and police abolition
James	US West Coast	Mental health, youth development

indicates that community organizers themselves will likely express a variety of approaches to working with data as well as a variety of understandings about how data can be used as a tool for grassroots-powered change [18, 24, 27]. Crooks and Currie posit that datafication places community organizers in a double bind [11]. On the one hand, data can be a tool by which organizers can accomplish goals. On the other hand, datafication can "threaten to responsibilize individuals and communities for documenting collective harms that are already known to the state," [11, p.202]. In their review of work on data activism, Crooks and Currie posit that agonistic data practices may be a way out of double binds for community organizers working with data. They define agonistic data practices as "beyond the strictly representational and quantitative, [exploring] other potentialities of data: the affective and the narrative," [11, p.209].

3 METHODOLOGY

This late-breaking work focuses on a qualitative analysis of nine interviews collected as the beginning of a larger interview data collection focusing on community organizing in communities of color in the US. In this project, we focus on a broad, guiding research question: What are the data practices of organizers working in minoritized communities? In this paper, we limit our findings to those aspects of data practices relevant to an interest in narrative aspect of data, although our overall approach is not limited to this concern.

Participants were recruited through Twitter postings and cold emails to some individuals with an online presence, with a purposive sampling of organizers working on a range of issues. We first screened potential participants to ensure that they self-identified as community organizers. Participants then filled out a pre-interview survey that requested information about their background and samples of data work. Note that we did not require participants to be self-identified as "data scientists" or "data people"—we focused on their understandings of data rather than professional or educational credentials.

Interviews were conducted by the first two authors via teleconferencing software or in-person. Interviews began by asking about participants' community organizing experience and then moved to ask about the role of data in their community organizing work. We followed up with participants' own articulations of what data meant to them. We also asked more specific technical questions about data storage and processing for participants who did work closely with larger data sets. All interviews were recorded and professionally transcribed.

Using the software MaxQDA and an iterative, inductive approach, the first two authors independently coded one randomly selected interview using a coding scheme focused on descriptions of professional activities [34]. The authors

then discussed the codes and iteratively created a dynamic codebook by which the rest of the interviews were coded and recoded [32].

Based on the breadth of data practices, the great variety of types of data, and the pronounced heterogeneity of working conditions revealed by interviews, we adopted a two-part thematic analysis of responses. These are presented in our findings. The results presented below concern one specific aspect of the data practices of community organizers: an interest in using data to support narratives [12].

4 FINDINGS

Approaching our data with a focus on narrative, we saw that data practices centered on the act of legitimization oriented toward different audiences. Here we present the various forms of legitimization in relation to the way data was used to craft stories about the organizers' work to various audiences. As it appeared in our interviews, legitimization concerns attaching a particular goal, incident, policy, or phenomenon to a norm or value: organizers did this by using data to tell stories that attached their efforts to movement goals.

4.1 Legitimizing the work to oneself

Community organizers shared data practices that were directed to themselves. In these cases, the data practices helped legitimize the work that they were carrying out, which usually did not produce quick results. Polly found encouragement in viewing the data that quantified her supporters: "The data is like, 'Okay, 150 people in my Slack, cheerleading, this work. There's 100 people donating, or cheerleading this work. There's 7,000 Twitter followers cheerleading, this work.' All of that is anti-burnout fuel." Here the data functioned on an affective register. Polly termed this data practice of checking her online following as 'anti-burnout fuel', since it helped her feel like her work was being noticed and appreciated, and such feelings served to keep burnout at bay. The quantification of support legitimized her efforts to herself in moments of doubt.

4.2 Legitimizing the need for change within the community

One frequent end to which data practices were oriented was consciousness-raising. Bo shared that he asked his coworkers to document encounters with management and in so doing, recognize that patterns of abusive behavior from management was not acceptable. Through the data practice of documenting their experiences and sharing them with one another, Bo hoped that his coworkers would be further moved to organize for better working conditions. This data practice sought to legitimize the need for organizing among the community members and build a narrative that they deserved better conditions.

4.3 Legitimizing position within the community

Organizers shared that they needed to build trust and make themselves and their organizations legitimate and accepted in the community. Several organizers described data practices that centered on the refusal of data collection about community members. For example, Harvey shared that although they could have qualified for more groceries at their free grocery popup if they collected data on the community members who came to get food, this would deter undocumented folks from coming for groceries. Harvey's organization's refusal to collect this data meant that undocumented community members would be protected and able to continue getting groceries.

Another form of legitimization in data practices oriented to the community was a form of translation. Matthew shared that he believed data about mental health could be helpful to the community he worked with and was from, but he

noted that translation work was required to ensure that the data was viewed as legitimate by community members. In attempting to develop the community's acceptance of data as a potentially helpful tool, he also worked on ensuring community members could direct the kinds of data they wanted to be collected about themselves with regards to mental health.

4.4 Legitimizing claims against the state

Data practices sometimes involved demanding information from the state to then legitimize claims against the state. Harvey and Ricky both shared that they had demanded data from the state through Freedom of Information Act requests. They then used the data to support claims about issues such as city budgets and police transfers to ICE. The statistics that are produced from this kind of engagement with the state-produced data may then be used to write letters and create awareness campaigns among legislators around a newly defined issue.

4.5 Legitimizing calls to policymakers

Community organizers use data to legitimate their advocacy for policy, especially at the local and state level. Some use data they have collected as a partial basis by which to draft bills for which they then seek sponsorship among legislators. Polly shared that she went to city council meetings and participated by sharing data about the causes on which she focused. She noted that at times policy makers asserted statistics that did not align with the experiences of the community organizers, so contesting this data was another data practice oriented to the state. For example, in Polly's work on broadband access, she saw a legislator produce a map of broadband connectivity that claimed her city was already totally covered. However, her organizing allies had their own data that they offered to legitimize policy to support further funding for broadband equity.

4.6 Legitimizing requests to funders

Funders formed a particularly important audience for data practices. Many of the community organizers we talked to shared a salient connection between quantitative data and funding. Funders often required data from the community organizers as a means of legitimacy and accountability in order to apply for or remain in good standing for funding. Em shared that before putting together a proposal for a new project with their community organization, data is collected about the local conditions to help form the budget and justify the need. For Zane and Miranda, distributing Naloxone to people was an important part of their work. Naloxone was provided by the state as part of a lawsuit settlement, so data needed to be reported to the state about the distribution of the Naloxone in order to receive more for distribution. Institutional funders require data in proposals and follow-up reports, but community organizers also report orienting their data practices to crowdsourced or individual funders as well. Miranda noted that they post how many meals have been delivered, with photos, for patreon supporters and instagram followers, so that individual donors also feel that their donations are being used legitimately. Polly similarly mentioned using data about the number of attendees at workshops in order to post on social media and solicit donations to create further workshops. Polly was simultaneously critical of data collection for institutional fundraising, noting that data was "a tool of the nonprofit-industrial complex to get me the funding I need." She resented the metrics that felt impersonal and were imposed by the funding agencies.

4.7 Legitimizing lived experience

Community organizers had different dispositions, from resentment to embrace, of the role of data in verifying the lived experiences of community members. It was common for the organizers to share that collecting data only confirmed

what people in the community already knew from living through issues such as homelessness, over-policing, and disinvestment. On the other hand, some organizers valued the importance of being represented in data. Harvey shared that having data about HIV was essential to his organizing work to get resources toward addressing the disease. Polly hit on this contradiction in her comments to us:

And the thing is, [Dan is] convincing people that need convincing. He speaks to state elected legislative aids. The policy people that are making legislation, or if you did a panel in front of city council or county council, you need the Dan in the room to make people be like, "Oh, this is a serious issue." But I feel that that also is perpetuating white supremacy. Because it's like you need that white guy academic in the room for them to all of a sudden care about evictions. But if you put a black trans person in front of them talking about how they got evicted, they'd be like, "Well, you didn't pull yourself up by the boot straps," right? Some sort of bullshit like your story doesn't matter. Your story isn't representative of data or whatever. Part of a way to use my privilege is to reject that as the way that we have to have a Dan in the room to be taken seriously.

Polly's friend Dan is a data scientist who works with her on advocacy with local elected officials. While Polly appreciated Dan's efficacy in convincing policymakers, she was also troubled by the way that issues such as evictions only matter when "a Dan" was in the room. She sought to reject the bias that made Dan able to convince legislators while those who had actually been evicted were ignored.

5 DISCUSSION AND FUTURE WORK

Our findings demonstrate a range of data practices around narrative, oriented to a range of legitimization actions. Many times, these data practices are contradictory. We even find contradictory data practices discussed by the same community organizer. Rather than attempt to resolve these contradictions, we follow Fortun's elaboration on the concept of double binds to take contradiction as a productive lens for analysis [17].

A double bind situation is not simply a situation of difficult choice, resolvable through reference to available explanatory narratives. "Double bind" denotes situations in which individuals are confronted with dual or multiple obligations that are related and equally valued, but incongruent. Double-bind situations create a persistent mismatch between explanation and everyday life, forcing ethical agents to "dream up" new ways of understanding and engaging the world. They provided a lens for observing experiences produced by established rules and systems, yet not adequately described in standard explanations of how these systems function and change."

Here we highlight double binds and the ways in which organizers find ways through. These double binds serve as starting points for further thematic exploration in our ongoing research.

5.1 Double binds around legitimacy and funding

One double bind faced by some community organizers is the demands of data for funding. They want to protect themselves and their communities from surveillance but funders require a particular type of data in order to release funds. Some find a way out of this by choosing what matters more: serving more people or serving people who otherwise would not be served, as Harvey's example with the free groceries shows. Or, some community organizers are creating new forms of data to prove to funders that they are indeed responsibly using donations without necessarily capturing

data about people. Here community organizers are in control of how much or what kind of data they are sharing and need not share anything they feel might endanger or discourage people they work with.

5.2 Double binds around legitimizing lived experience

Another double bind that community organizers navigated centered on data practices that sought to legitimize the lived experiences of minoritized communities. On the one hand, accepting that they needed to use data to validate what they already knew and lived through every day was a concession that their realities were somehow less than what could be represented quantitatively. On the other hand, deferring to demands for data could unlock resources, and provide representation that some organizers felt to be a validation of their identities. Organizers sought to navigate this by contesting the unquestioned valorization of data while still using data to further their causes.

5.3 Future Directions

These are but a few of initial themes our preliminary findings point us toward. We intend to carry out 100 interviews total, and are in an ongoing process of expanding recruitment. Our iterative analysis process allows us to further adjust the interview protocol as needed and continue developing the codes by which we analyze our qualitative findings. In doing so we aim to deepen and expand this initial index of data practices of community organizers.

This interview project forms the first phase of a longer project in which we anticipate carrying out co-design projects with community organizers to address central issues arising at the intersection of datafication and community organizing. Our tentative interest includes the preservation of documents generated by community organizers, such as data visualizations and letters to legislators, and the inclusion of such documents in K-12 data science curricula.

Our project points to the multiplicity and dynamics of datafication, how ways of knowing are wrapped up in both the macro-politics by which public life in representative democracies is governed and the micro-politics by which everyday people in our communities live, work, and pursue their ambitions.

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