Illegitimate Civic Participation: Supporting Community Activists on the Ground

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ABSTRACT

In this paper we examine the way Information and Communications Technologies (ICTs) support forms of community activism that operate outside formal political and institutional channels. We have done fieldwork with local housing justice activists in order to gain insight into the way ICTs play a role in complementing forms of civic engagement that challenge, rather than work with, institutional authority. We argue that ICTs are instrumental in supporting and shaping three alternate information practices—situating, codification, and scaffolding—that each serve the goals of direct democratic engagement. We also show how local activist communities engage in these three practices through their varied use of ICTs, including the ways they provide mechanisms for informal but politically significant—and legitimate—civic engagement.

Author Keywords

Community Computing; Civic Engagement; Public Participation

ACM Classification Keywords

K.4.3 Organizational Impacts

INTRODUCTION

There are multiple ways to construct a democratic society [47], and multiple ways one might participate in such a society. Whether through participating in elections, or becoming involved in different citizen organizations, or working outside the 'system' to effect change, each mode of citizenship brings with it different sets of challenges for interpreting and accomplishing work and establishing collaborative practices to accomplish what are often large-scale goals to shape policy and governance [30, 47, 18].

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Within the broad and diverse milieu of civic engagement, we can find diverse scholarship on the role of Information and Communication Technologies (ICTs) as a public good [22, 33, 35]. In looking beyond the commercial development, consumption, and use of ICTs, researchers have engaged in a number public sites: studies of educational policy and development have gauged the efficacy of ICTs as a pedagogical tool [48]; international development scholars have incorporated ICTs into user-centered design processes in developing countries [5, 36, 37]; and sustainability studies have asked how we might incorporate ICTs into sustainable environmental and economic practices [24, 28].

Additionally, researchers have begun to look at the use of ICTs in different political contexts. For example, with the growing presence of ICTs in public spaces, there are concerns of privacy, security, and authority; concerns made ever-more present after revelations of wholesale surveillance by government agencies [1, 3]. There are also questions on how to best leverage ICTs to encourage civic participation: the capabilities of contemporary social computing present new opportunities for the kind of deliberative democracy around which western political processes are based [9, 15, 27].

Many of the efforts to explore the role of ICTs in civic engagement dwell on concepts of e-democracy or digital democracy, which aim to realize traditional political ideals through technology mediated interactions. These interactions are meant to complement more familiar in-person, or analogue, forms of democracy and typically focus on the translation of traditional political practices into online spaces, including but not limited to e-polling and online fora for supporting discourse to inform public opinion [47].

There is a need to expand upon the sites and goals that commonly dominate efforts under the umbrella of digital democracy. We need to interrogate how different kinds of civic engagement exist on digital platforms in spaces outside formal political and institutional channels. What would it mean to think of political participation outside traditional, "legitimate" means of interacting with government, such as voting, lobbying through interest groups, or engaging in public oversight? How might ICTs play a role in complementing—rather than replacing—existing civic activities that are by nature more grassroots and local?

By "legitimate" civic action, we refer to the mechanisms and processes available to citizens in order to influence change and decision-making on issues of concern. Such action often takes place through the channels of representative democracy, such as elections, public officials, and policy regulations, but there are many other ways one might legitimately interact with government. Beyond e-townhalls and Change.org petitions, how are ICTs used to support and coordinate concrete, 'on the ground' political work done outside established political institutions? How do we consider the impact of these technologies on issue advocacy and activist work?

To explore these particular and understudied questions, we conducted ethnographic fieldwork with a housing justice activist group. Our work gained insight into how the specific affordances of different ICTs supported their mission of confronting the social injustices connected with the recent-and on-going-housing crisis in the U.S. The affordances of the ICTs they used in their work highlight a number of issues and concerns that demonstrate how current technologies are not well suited to the particular practices of activist organizations. Whereas institutionally mediated participation might be considered legitimate civic engagement, the activists with whom we worked engaged in a range of political acts, information management practices, and ways of organizing labor that challenge notions of legitimate action and demonstrate the role that ICTs play in supporting alternate, illegitimate forms of civic action.

ICTS AND CIVIC PARTICIPATION

The historic role of ICTs in supporting different community goals is long and diverse. From systems that support public deliberation in urban planning processes [20], to systems set in international contexts to support post-civil war reconciliation [4], ICTs have been deployed to both bring people together and to mediate the impact of those collective voices. These implementations are based on different models and values of democracy, which in turn structure how the ICTs are situated within particular sociocultural systems.

Digital Democracy

The development of the personal computer and the Internet were both inextricably bound to, and informed by, the counter culture movements in the US [45]. These factors instigated a rise in techno-democratic discourse where civic engagement and public participation were recast in light of using ICTs to overcome the physical, temporal, and spatial limits of traditional democracy [34, 35, 47].

Though often sanguine and uncritical, these early narratives of digital democracy brought to light different principles of democracy that, ideally, ICTs could enable—equality, access, and accountability, among others. However, just as the constituents of a democracy are heterogeneous and diverse, ICTs have varied impacts and influences on political practices. van Dijk deconstructs the concept of digital democracy and puts forward a thoughtful analysis of the interplay between different forms of democracy and various ICT

affordances that might support or hinder different outcomes. [47]. van Dijk's analysis is comprehensive, but for the purposes of this paper, we limit our analysis to the models of democracy most commonly associated with civil engagement and community participation in the west, those of direct (*i.e.* non-representative) democracy: *participatory*, *plebiscitary*, and *libertarian* democracy.

A participatory democracy focuses its attention on the development of citizenship through civic education, discussion, and debate as a primary response to distrust in a ruling establishment [47]. The goal is to amass a collective will of the people such that they can directly engage with political officials, rather than communicating via intermediary organizations or representatives. Examples of this kind of support include virtual town halls and teleconferences. The main concern regarding ICTs in this model is access: ICTs should not only cater to the social, intellectual, or economic elite, but should work to narrow the gap between the information rich and the information poor.

Building on the participatory model, a *plebiscitary* democracy seeks to amplify the voice of an informed citizenry [47]. ICT use emphasizes more direct citizen involvement, such as voter registration systems or tele-referenda. These systems are, ideally, maintained and informed by the citizenry to ensure that their interests are served and not coopted by the ruling establishment.

The *libertarian* model emerged with the rise of personal electronics and, more specifically, the Internet [47]. Like the previous models, the libertarian model conveys a distrust of institutions; governmental entities are presumed to be unable to solve constituents' problems and, as a result, citizens must be autonomous, engaging in politics through group association and the "horizontal communication capabilities" of ICTs. The libertarian model moves away from artifacts of e-democracy—like tele-polls—and instead emphasizes discourse among the citizens themselves through ICTs like chatrooms, discussion boards, and email.

In van Dijk's model, ICTs do different kinds of democratic work, but a common thread binding them is the importance of an educated populace who engages in debate. Informed citizens and discourse are also important for political legitimacy according to Saward [43], who writes that public deliberation is crucial because it enacts political legitimacy: citizens are informed and reason amongst themselves to reach consensus, which then forms the basis of legal rules and a stable political system; the foundation of deliberative democracy relies on civic participation as exercised within the boundaries of an institutional entity (i.e. government) [42]. Laird's interpretation of pluralism similarly necessitates participation from an engaged populace through the formation of interest groups who influence policy outcomes, not unlike the way libertarian democracy emphasizes free association with interest groups [30, 47]. The associations form around issues of concern and organize to ensure that officials in power make decisions for the good

of the polity. Organized pluralist groups are also a mechanism for political legitimacy because they act as a safeguard to keep political officials in check, ensuring they act justly in service of their constituents. These actions of the pluralist groups can be seen as information management practices in the service of democracy.

Public Civic Service

Beyond the deployment of ICTs for the purpose of supporting governance, the introduction of ICTs as a public good has been explored through a variety of perspectives. In addition to contributions made to pedagogical and economic development domains [24, 28], ICTs also address various challenges faced by non-profit organizations to better address questions of accountability, transparency, and information flow [22, 33, 40, 41]. To this end, the function of ICTs in these public organizations is similar to their role in private organizations: they contribute to a more efficient organization, maximizing the use of resources and distributing them to best serve the needs of the organization as a whole. However, non-profit organizations face challenges unique from corporate contexts: e.g., non-profit work relies heavily on the labor and efforts of a volunteer workforce, which typically entails a high staff turnover and varied training or educational backgrounds [23, 34, 39]. Organizations that rely on volunteer efforts also employ ICTs to create make-do structures to account for gaps in knowledge. training, or infrastructure. These solutions serve important organizational needs as ICTs become ways to bridge and coordinate efforts in resource- and labor-constrained environments [8, 13, 41].

In a similar vein, researchers have introduced ICTs into neighborhood contexts to equip residents or participants with particular skillsets with the aim of empowering the community to engage in civic participation [19]. The aim of this kind of civic work is to encourage critical thinking about common issues and concerns, develop engagement with a community's physical and lived environments, and coordinate efforts on multiple scales to improve services and local collaboration [13, 39, 41]. One of the particular challenges faced in these settings is knowledge transfer because working at the scale of small communities often means relying on specialized and local knowledge that either requires specific expertise or the implementation of systems (social or technical) to enable information transfer [8, 32].

The introduction of ICTs into more institutional or formalized environments also does not necessarily focus on developing skills or acquiring knowledge specific to a particular domain. Gordon incorporated virtual worlds into traditional planning practices (*i.e.* charrettes) to encourage empathy and understanding among residents of the same community [25, 26]. This expansion beyond more conventional planning tools offers researchers new ways to engage with various publics: Gordon's work created space for residents to better envision potential changes made in their neighbor-

hood. The workshop also offered some transparency to previously inaccessible planning conversations and vocabularies. On a pragmatic level, ICTs can also offer new sources of data to incorporate into their analysis. Social media, for example, has the ability to broadcast information to a set audience, but also collect real-time data that can facilitate a connection between city departments and citizens [16, 17]. ICTs writ large offer channels of communication that can facilitate both formal (e.g. those aimed at organizational efficiency) and informal (e.g. those built to encourage empathy) modes of civic service to benefit the public.

Given the diverse ways ICTs have made their way into public life, there is a clear richness to ICTs as they facilitate different kinds of civic participation. ICTs also cater to a variety of democratic relations by enabling specific kinds of interactions through many different legitimate means: informed citizens can engage with each other, interest groups can influence policy decisions, and communities can contribute to urban planning practices. However, these forms of civic participation are mechanisms for *representative* democracy: elected officials have the agency to enforce change and ICTs can only ever act within predetermined processes.

Our fieldwork speaks to the boundaries of current systems by examining how activists use ICTs to serve the democratic ideals mentioned above, but through more direct and engaged tactics. Activist work stresses the need to explore how ICTs can support alternate democratic practices to beget different kinds of outcomes. Our ethnographic fieldwork suggests at least one avenue: while ICTs can, themselves, be vehicles through which democracy is practiced, our time spent with a local activist group showed the value of ICTs to coordinate and facilitate already existing political work on the ground. Through our observations, we developed insight into the particular strengths, needs, and limitations of activist groups who use different forms of ICTs to achieve a more inclusive and equitable society.

BACKGROUND. METHOD. PARTICIPANTS

In order to understand the particular needs and uses of ICTs by activist organizations, we conducted ethnographic fieldwork with a local issue-oriented community called Occupy Our Homes Atlanta (OOHA). The organization was an outgrowth of the Occupy movement that developed in 2011 to protest social and economic inequality. OOHA focused specifically on housing justice and provided foreclosure and eviction rights education. They were driven by a belief that decent housing is a universal human right, that disenfranchised communities have the right to self-autonomy, and that politicians should be held accountable to their constituents rather than to corporate stakeholders. The tactics that OOHA deployed were often antagonistic and attentionseeking, which created a complex relationship with supporters, the public, and private officials with whom they interacted. The group engaged in non-violent direct action, such as protests and sit-ins in public spaces. These activities

were sometimes illegal, but were not always intended to break the law. This intentionality is important to distinguish from anarchists, who frequently operate under the guise of activism; OOHA, by contrast, only engaged in illegal activities strategically to forward political causes in the service of justice. OOHA's work was largely in resistance to established institutions that they saw as major players and responsible parties with respect to housing issues (e.g. banks, local authorities).

We spent over a year and a half deeply involved with OOHA, participating at least three hours a week in organization meetings and protest events. During this time we documented our observations and participation through extensive, field notes and memos [10, 13]. During our time with the organizations we hosted design workshops to explore specific questions of technology use [2]; we contributed administrative work (e.g. note taking, data entry); we attended major actions, such as marches, court auctions, and press events; and we helped creat internal documentation (e.g. by-laws, codes of conduct). The time spent with the group has offered insight into their organizational norms, motivations, and the activists' perceptions of their own work [2].

The group was a rich research site because of the unique role they serve: their strategies were deliberately enacted in what they refer to as "the public court." They conducted their work publicly, rather than through less visible services that might be directly provided to home owners at risk of foreclosure and eviction. This approach was based on a commitment to creating an infrastructure of engaged and informed citizens inspired to take action in instances where institutional politics had failed. In addition to embodied political action on the streets, much of OOHA's work dealt with information gathering and management: their protests were in direct response to exploitative—in many cases, illegal—and generally invisible actions taken by banks following the housing-market collapse [43]. The banks that OOHA confronted were large, established institutions, that had a vested interest in making invisible the knowledge about their unjust practices: it was the predatory practices of the banking industry in the late 2000's that motivated the group to engage in direct action.

While information practices—collecting and sharing data, documenting specific events—were part of the group's everyday work, knowledge gathering and analysis played a very particular role during protest actions. It was the specific information needs and information sharing practices that developed during a protest action that became particularly interesting as an under-explored venue of collaborative work. To illuminate the particular needs of activists engaged in protests, we focus on a four-hour window of a single day in August where OOHA organized a series of protest actions to support a resident who was forcibly evicted from his home that morning. This window of time is intentionally narrow in order to demonstrate the depth and

intricacy of activist work. Our field notes, observations, and coding schemas resulted in the following analysis of activist activities and three categories of information practices. The described practices are emblematic of the group's ICT use under contingent, unpredictable circumstances, but also shine a light on the way in which the chosen systems operate in service of democratic principles.

ILLEGITIMACY IN ACTION

Over the course of the four-hour protest action, OOHA engaged with ICTs across three distinct sets of practices: situating, codification, and scaffolding. Situating was a process of revealing to the public the issues at hand and the consequences of those issues to which the group was trying to draw attention. Codification included acts of translation where one domain, issue, or body of knowledge was translated for different purposes within the organization. Scaffolding operationalized different bodies of knowledge in order to help recruit and marshal additional support from a wide range of loosely connected social justice groups, concerned community members, and neighbors. These three concepts are not mutually exclusive; practices situated in the moment of a protest action often connected to multiple categories of ICT use simultaneously. By discussing them separately, however, we want to draw attention to the labor, design, and organization that goes into each of these practices in order to accomplish the organization's civicoriented goals while working in highly volatile contexts.

Situating

ICT use in the service of *situating* entails the strategic positioning of resources in order to broadcast information to audiences outside the housing justice group. Specifically, activists used ICTs to *situate* during the action to deliberately reveal hidden information; revealing this knowledge created an argument about the resident's individual eviction within the context of the larger housing crisis. Part of the group's work writ large was making transparent banking practices that were viewed as exploitative; this information sharing practice typically dealt with financial information from banks, deeds and related ownership documents, or internal organizational structures that could identify accountable parties.

Situating practices played a much more pointed role on the day of an eviction protest because it set the context for the action itself: ICTs were used to uncover and share what the group argued to be predatory banking practices, which showed what led to the eviction of the resident that day. The motivation behind this design was the hope that it would create a powerful statement and act as a compelling call to action for others to join the protest. Searching for information and making it public may resemble research practices in similar organizations, like advocacy or policy groups, but a key distinction was that OOHA activists believed institutions were deliberately hiding information; revealing these bodies of knowledge was what justified and legitimized the group's actions, which were commonly seen



Figure 1: The Home Defenders League Twitter feed shows tweets leading up to and on the day of the protest action.

as hostile or antagonistic. It was the severity of the hidden information—both the efforts in keeping it hidden and the gravity of the exploitative practices themselves—that directly informed why the group felt it necessary to take any action at all.

During the eviction protest we observed, the activists used Twitter to communicate general updates about the individual resident's eviction. The updates themselves were not a unique use of Twitter, but the group did take advantage of the affordances of the medium in order to craft a particular argument about the protest to other audiences. The rhetoric heavily relied on the Twitter feeds of affiliate housing justice groups, as well as an intimate knowledge of the content of affiliate group feeds.

The Home Defenders League (HDL) is one such affiliate group. HDL is a national organization working with smaller scale groups to offer strategies and tactics for defending homes. They can be seen as more of an advocacy group that deals in bureaucracy and policy changes rather than direct action. Figure 1 shows six tweets from the HDL feed leading up to and on the day of the eviction. The feed combined different kinds of knowledge around the same topic and incorporated different modes of information delivery, including Facebook pages, MSNBC video clips, New York Times news articles, economics blogs, and a widely used progressive hashtag (#P2). The use of the #P2 hashtag can itself be seen as a kind of situating practice, but one that is built into Twitter itself and does not deeply engage with the affordances of the medium. The HDL feed already participated in a process of revealing and informing; this is key to understanding the role of situating during the protest action.

Consider the tweets in Figure 1. The argument created through the tweets is through juxtaposition: the resident's eviction was framed as part of a national crisis, which was a direct result of the practices of large banking institutions. The rhetoric afforded by the Twitter feed is possible because the activist tweeting on the ground was intimately familiar with the HDL feed and its contents: by her own admission, posting on Twitter the day of the eviction was almost entirely driven by the certainty that it would be retweeted by HDL and similar groups. This did more than just boost the signal of communication going out from the protest: it leveraged online content strategically as a way to situate the resident's individual eviction within the larger context of housing justice. The on-the-ground updates showed some of the very material, embodied impacts of the crisis (images of personal belongings thrown on the lawn, crowds of supporters, etc.), but also the more factual, dataheavy tweets from affiliate organizations demonstrated the vast scale and magnitude at which housing injustices occur.

The situating process is not without its stipulations: when it is not made explicit what information can and cannot be shared, situating can fail and effectively work against the

group. During the action, a non-member was present with a video camera livestreaming the day's events. It was discovered that he had posted sensitive, internal material online and energy had to be diverted to redact the information and do damage control. In that moment of re-covering, it demonstrated how important control was for this practice; situating can be counter-strategic if the group's boundaries are not closely and intentionally maintained. By the same token, it was because of OOHA's semi-opaque positioning that they were able to gather, uncover, and communicate information about exploitation in housing without larger banking institutions acting in retribution (e.g. taking legal recourse).

Codification

Codification refers to the ways group members tailored their communications to different audiences; this act of translation ensures that specific bodies of knowledge were directed to meet particular ends. While there were a few OOHA members who had participated in similar eviction actions previously, that knowledge still needed to be distributed in some capacity to the other volunteers and supporters. Codification made it such that people who were present learned practices that could then be adapted to best reach different recipients. On the day of the action, this took the form of political solidarity; volunteers recruited people to be physically present at the residence to offer support to the resident and to shame impending authorities into not carrying out the eviction.

Supporters at the eviction were given a standardized text message to send to their contacts and a general script for voice conversations to invite people to the residence. Beyond the script, however, there was some instruction as to the subtleties of recruiting: there were a number of factors that would impact how politically palatable the call would be, such as the strength of the relationship with the caller and the respondent's political persuasion, but the most influential factor was the selection of communication technology.

As seen in the previous section, Twitter was used to broadcast a blanket invitation that, when retweeted by affiliate groups, had a slim possibility of successfully convincing anyone to join the action. In order to achieve direct participation, the most widely used modes of communication were text messages and phone calls and the decision to use one over the other was complex. Some contacts preferred entirely text-based communication, so a phone call might potentially backfire, though some volunteers thought that, in this context, a phone call would impart a sense urgency, which would better garner political support. Some group members, having engaged in recruiting before, were familiar with rebuffs and shared with the group some tactics for preempting negative responses. Text messages might be more effective with people who were ideologically aligned, whereas phone calls were a medium better suited for having conversations, like explaining the unfairness of the eviction or the importance of having physical presence at the house.



Figure 2: The Facebook macro uses both a visual image and text to try and encourage civic action.

In addition to phone calls and texts, volunteers were encouraged to share with their Facebook networks a member-created image macro, a short caption (typically white, bold, sans-serif text) superimposed on an image. The genre is typically humorous or witty, such as lolcats or Advice Animals, though the group had co-opted macros as a form of information broadcast, relying on irony or satire instead of humor.

The image offers another mode through which volunteers tried to recruit supporters at a different scale than phone calls or text messages as the posted image on Facebook reached a large audience at once. The image tactic spread a blanket message, like Twitter, but readers on Facebook have stronger relationships to the resident via the volunteers posting the image, and thus are more likely to engage in varying capacities (*i.e.* making a phone call, sharing the image, showing up at the residence). Activists and supporters sharing the image on Facebook relied on existing relationships with people—*i.e.* people who may be politically or ideologically aligned—to respond to the macro with some form of action.

The challenges of codification can be attributed to the speed of communication afforded by each technology: if a volunteer was prompted for more information than she had been given by a more experienced member of the group, the conversation falters and the communication structure begins to break down. This has severe implications when trying to build community support for the resident. If the distributed knowledge was not enough for the volunteer to be persuasive in a conversation, the entire action was impacted. A lack of information might demonstrate ignorance about the subject, lack of dedication to the cause, or—worse—might result in misinformation, defeating the driving force behind codification efforts entirely.

Scaffolding

Scaffolding refers to ICT use that creates space for non-group members to participate in an action without prior knowledge of or history with an activist group. The motivation behind this observed practice was to strategically distribute information via ICTs so that people who were politically aligned could participate in the group's actions without being physically present at the residence. Scaffolding harnessed the mo-

mentum of allies, community supporters, and affiliated social justice groups and allowed them to take action for and with the resident with minimal delay and through varying capacities

The aforementioned image macro was not pre-planned, but was created at the residence after the action had already started. The creator of the macro stated that her intention was to broadcast eviction information to as many people as possible in hopes they would take up the call to action and help save the resident's home. She also explained that she opted to use a meme in spite of its reputation online (i.e. as a visual punchline) because "it worked." The creator explained the different ways in which Facebook, as a platform, offered the most opportunity for reach and visibility. Visually, the macro used a striking image, which was an effective hook into the textual content. A mundane 'like' on the image was meaningful to the resident and was seen as a form of emotional support or political solidarity. The image also communicated more than a text description of the event—it was affective as much as it was informative—which the creator hoped would lead to it to be shared more widely. She described the 'share' function as relatively user friendly and requiring minimal Facebook expertise. Scaffolding was incorporated into the image through multiple layers of invitations: as posted via Facebook, the image was a link to a wall post on OOHA's Facebook page that explained the details of the resident's eviction. The macro was also an invitation to multiple forms of action: in addition to Facebook's 'share' feature, there was a script provided in case someone called the Fannie Mae phone number. There were also links to the resident's online petition and various blogposts about his story leading up to the action, both of which could have been 'liked' or 'shared.'

The ultimate goal of using ICTs during the action was to draw out more people to support the resident in person during the eviction process. The scaffolded Facebook macro, however, provided some flexibility to allow for varying kinds of engagement: whereas the situated Facebook macro relied on existing resources (i.e. the strength and closeness of interpersonal relationships), the scaffolded image operated autonomously and allowed for supporters to participate in the action remotely without prior training or needing to be assigned tasks. The posted image on Facebook was a way to instrumentalize political support and resulted in a high post reach and an organized campaign to flood Fannie Mae with phone calls voicing support for the resident. To date, the macro reached 359 people and has 182 comments, 317 likes, and 2,893 shares, compared to the 50 or so people who were physically present the day of the eviction.

DISCUSSION

Metrics, Evaluation, and Success

Most of the ICT use we observed offered some degree of metrics; OOHA could tally Facebook shares and Twitter retweets after a protest action. However, it is unclear how the metrics would inform any further action or decisions within the group; there is no implicit meaning to a Facebook like or a favorite Tweet. Other tactics are even less legible. Other than physical bodies present at the residence, it is difficult to identify what qualifies as a success: a reclaimed home might only be temporary, and even the presence of supporters is ambiguous. A crowd could connote a network of allies, perhaps from affiliate groups, but supporters present at the residence may have their own motivation for participating (e.g. shared press, owed favors, recruiting for their own organization). This highlights a challenge for incorporating ICTs into activist practices: social computing technologies offer the allure of various metrics—such as number of retweets, email newsletter opens, or blogpost views—but they do not translate into any clear criteria for evaluation or directions for future action.

Due to the intersectionality of social justice work, it is often futile to connect a particular task with a goal; end goals are varied and interrelated, which can be at odds with design processes that are often oriented towards specific uses. Part of the challenge is assigning specific goals to particular actions. Consider the democratic models introduced earlier: it is clear how the Facebook macro is aligned with principles such as narrowing the information gap or informing a populace, but it becomes more complicated when tying the macro to a specific goal, such preventing someone's home from being foreclosed upon. As such, OOHA makes decisions to support the city-wide housing justice movement, but they are also oriented towards less specific but related objectives, such as progressive politics in the predominantly conservative Atlanta region or regaining local and community control in disenfranchised neighborhoods. Additionally, a particular protest action may try to address many goals simultaneously.

In the same way that OOHA is driven by a network of overarching objectives, the individual metrics of a specific use of ICT must be situated within a larger scale of impact. The Facebook macro might not have done any civic work in and of itself, but it resulted in a call-in campaign to the regional Fannie Mae office, which might have some immeasurable result in the future. There is some demonstrated impact, but there is no way to evaluate the role of the ICT itself; the group can infer that it was the number of likes that led to the phone calls, but it cannot validate that through the available tools. van Dijk suggests that particular ICTs are better suited for different kinds of civic work [47]; our analysis of the protest action discourages limiting a single goal or purpose to a particular use of an ICT. The Facebook macro could have made multiple impacts: it could have raised awareness, facilitated discourse, or instigated 'real world' action. However, the expectation that the use of or evaluation of an ICT for a single effect is to limit the potential impact it might have—to OOHA, its cause, and its members—more broadly.

We suggest a reframing: the question should not ask *how* ICTs could best measure success, but rather *should they*? Because of the difficulties inherent in activist work, morale and organizational motivation might suffer when actions are divided into successes and failures. This binary limits the activist group through over-engineering their work: by

categorizing a protest action a success, it imposes goals, qualifiers, and consequences that do not translate well to the kind of immeasurable objectives that activists work toward, such as political support or educating uninformed audiences. Often, activists will refer to an action in terms of highlights, accomplishments, and progressions, which helps members feel empowered and motivated to continue the work. This is not to be interpreted as acts of denial or placation, but rather acts of sustainability and care to prevent burnout, fatigue, or disillusionment; community empowerment is another example of impact on activist work that ICTs can facilitate, but cannot measure. While ICTs are impactful in operationalizing activist work, they do not provide legible feedback that is appropriate for evaluation.

Design Orientations

In some ways, designing systems to support activism poses similar challenges as designing for traditional office work: practices are dynamic and emergent, environments are contingent, and plans must be tailored to the specificities of each use case. However, because of the unpredictability of housing justice work and activism writ large, OOHA faces unique challenges in trying to do their particular kind of democratic work. Returning to van Dijk, his participatory democracy model assumes that information is freely available for a polity to self-inform [47]. However, the situating example demonstrates that what constitutes 'knowledge' is contestable and can be interpreted to have different implications for civic work, such as the role the banks played in the housing crisis. It is not enough to design a system for activists that reveals information, but it must also be assembled and contextualized. Additionally, activist work relies on ad hoc practices and quick responses: the Facebook macro would not have been as impactful had it been posted the day after the eviction, for example. This environment of unpredictability refuses system designs that rely on stability and persistency.

Rather than try to force structure onto the inevitable uncertainties of activist work, designers of activist ICTs should embrace these inconsistencies. It would be more beneficial to design for existing activist practices instead of imposing design onto activist communities. This reorients the typical design process: instead of identifying particular activist-specific problems (*i.e.* to solve through design), how can we design infrastructures to support an activist context? We suggest a move away from artifact- and outcome-centric ways of thinking about designing systems for activists. We instead propose *flexibility* and *process* as two examples that do not prescribe specific solutions or artifacts, but suggest approaches that can better support activist work.

Flexibility affords a less rigid relationship between how something is *designed* to be used and how it *might* be used; designing towards flexibility is to cultivate more of a possibility space to encourage creativity and interpretation. Thinking beyond outcome-oriented design, Gmail's delegation feature is an example of a more flexible approach: one

Gmail user can allow another access to their account such that the chosen delegate can view and send email from the delegator's email address. The delegation feature is specific or detailed enough to center on a particular goal or value—such as efficiency or collaboration—but caters to certain *circumstances* that might suggest how the feature is used, like constant absenteeism or distributed communication responsibilities.

We draw a parallel to Bill Gaver's work when designing for ambiguity [21]. Gaver argues that the design of artifacts can be intentionally vague to be provocative and engaging: a product can draw attention to inconsistencies, which resists a transparent or legible reading and in turn encourages users to be reflective and thoughtful. This approach would be beneficial to activists if there was a move away from the construction of artifacts and ambiguity was instead treated as a kind of design logic. Instead of an activist using ambiguity in a system to arrive at a conclusion or form their own interpretation, we would encourage ambiguity as a means to communicate an argument, much like the strategic use of Twitter and its retweet mechanism. We observed many instances of information gathering during the protest, but it was not until it was synthesized—that is, finding the ambiguities in the knowledge and leveraging them to create arguments-that the information became valuable and instrumental. In Gaver's work, ambiguity was an attribute designed to create particular interactions between the user and the artifact [21]. To design with flexibility in mind, we argue for ambiguity between different components or interactions, which creates space for activists to use a system for their own purposes, rather than a prescribed one.

Process refers to designs that operate more like a platform than a single, deterministic service. This approach emphasizes the relationships between and integrations of existing components, rather than individual components themselves. An existing example might be IFTTT (If This Then That), which links various services together: the platform relies on actions and triggers in order to connect and enable various web applications. For example, if a photo is posted to Instagram with a specific hashtag, that might trigger an automated post to Facebook and Twitter simultaneously, which would reduce labor spent on menial online updates when urgency is required elsewhere on the ground.

The emphasis on generative interactions invokes Björgvinsson, et al's framework for participatory design: they argues that design should be a process of democratization by pursuing ways to "organize milieus for innovation" [6]. Activist work could benefit from specific services that afford them more agency and control, but the activities would still be confined to the parameters and constraints of the platform. This kind of logic could be seen through the use of the Facebook meme: the activist acknowledged the limitations of the platform in communicating the group's message, but was also savvy enough to leverage its different features (e.g. sharing, liking) to garner multiple kinds of

support for the resident in a time of need, resulting in a dynamic that supported multiple forms of participation (*e.g.* political, emotional, organizational).

These two approaches might be at odds with particular values held by an organization—such as privacy concerns with flexible design—so they should not be applied indiscriminately. Instead, these approaches should be implemented within the context of a specific group's practices and values. We focus on process and flexibility as ways to better support activist work through underdeterministic design. Dourish points out that people do not encounter technology as designed rather but situate them into practice [14]. Indeed, this appropriation is the basis of activist work and should inform the design work that is done with or for activist communities. When designing systems to support activism as a kind of collaborative work, didactic principles, guidelines, or frameworks are overly prescriptive and would not adapt well to the fluid nature of their work. We encourage thinking beyond deterministic outputs to reconsider how ICTs might better facilitate existing activist practices to work more towards democratic principles rather than explicit results.

CONCLUSION

We observed how OOHA used ICTs at a housing justice action, which allowed us to begin teasing out ways in which systems can be used to support more on-the-ground forms of civic engagement and might allow us to envision different kinds of political support, participation, and communication. We bring attention to and draw out the nuances of particular activist ICT uses as opportunities for the CSCW community to better reflect on system design to better cater to these kinds of political work and facilitate illegitimate civic participation as a valuable and significant means of practicing democracy.

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