Strangers at the Gate: Gaining Access, Building Rapport, and Co-Constructing Community-Based Research

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ABSTRACT

This paper is about the work we do to create productive partnerships in community settings: developing relationships, demonstrating commitments, and overcoming personal and institutional barriers to community-based design research. Through an ethnographic account of the elements of community-based research normally elided from reports of design process, we explore how the impact of institutional histories and personal relationships went beyond simply identifying potential partners, but fundamentally guided the research questions and approach. We examine the different roles researchers play-researcher, confidant, advocate, interloper, invader, and collaborator-and how those roles create particular relations in the field. The contribution of this work is the development of a reflective account of the research in order to evaluate knowledge production, rigor, and advance methods for engaging in community-based research.

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INTRODUCTION

"In many respects, the legendary—if too frequently overhyped—ethnographic sympathy and empathy often comes from the experience of taking close to the same shit others take day-in and day-out..." [46:152]

Community-based research can be difficult. It places demands on the researcher that go beyond the work of structured inquiry. It places demands on the community members to accept unknown individuals and unknown outcomes

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into their lives. It is bound to relationships and requires balancing contributions to community with contributions to research.

Design research in computing has made impressive moves in the last decade to develop community-based research agendas with an aim to create strong participatory practices in order to meet communities on their own terms (*e.g.* [12, 13, 29]. These efforts have under taken considered strategies to understanding the impact of community-based approaches on research [11, 26], they have examined the implications of computing on a wide variety of communities (*e.g.*, [16, 32, 39]), and they have begun to sketch out a set of shared theoretical boundaries for productively engaging with community contexts (*e.g.*, [4, 19, 33]).

A common thread through this body of work is an agenda that seeks to elevate and engage with the perspectives of those within these sites of research and design. They are, whether situated in familiar cultures or not, sites Taylor has described as "out there" [43], where the social order and community structures are made exotic and privileged through careful deference to community perspectives and voice. To take Taylor seriously, however, we need to attend to the perspectives and voice of the researchers in order to articulate how research and design in communities together constructs the complexities "right there."

The challenge for CSCW is that as we endeavor to seek out and engage with perspectives in non-workplace settings, where attending to authority and power differentials entail explicit elevation of the voice of the disempowered, we need to attend to the consequences of privileging the voice of the research subject at the expense of revealing the concomitant influences of the researchers themselves. While it is often necessary to place our focus on research products that inform technology design, rather than on the process by which those products came to be, we often paint the researcher out of the picture, resulting in accounts that omit a substantial component of community-based research: the co-production of knowledge through exchange between researcher and subject [31].

Our aim here is to develop an account of how our endeavors in a community-based project were guided by the interactions with the community; to bring into our research account the challenges, day-in and day-out, that shaped the research and our analysis. We aim to reintroduce the mess

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into accounts of community-based research in order develop an account that acknowledges the many sites of knowledge production and the method assemblages that relate and enact those different sites of knowledge production [31, 46]. This paper is about the work that occurs before the work: developing relationships, demonstrating commitments, and overcoming personal and institutional barriers. Each of these shaped and guided our research and influenced our analysis and interpretation of what happened "right there." They are the often invisible elements of community-based research elided from accounts of design process, of technology development, of interventionist outcomes; however, the invisible work of becoming of the community no less shapes these outcomes than the choices made through design on which technology to develop, or which kinds of interactions to explore.

COMMUNITY-BASED DESIGN RESEARCH

In talking about "community-based" research, we are working from a specific but broad definition of community, one that Carroll has called "proximate community" [11]. Proximate communities are the settings where individuals share a common geography, a need to negotiate access to shared resources, and which determine membership through moral and behavioral norms [11]. Just as spaces become places through social construction [25, 44], the kinds of communities we are concerned with here build upon shared geographies but emerge from social relations.

Like Carroll, we agree that the use of "community" in the CSCW literature results from a turn toward engaging in socially meaningful sites of work-where the work comprises the numerous means of mediating membership, brokering influence, fulfilling individual and collective needs, and established shared affective connections [37]. While many of these elements also rightly apply to on-line or virtual communities (e.g., [9, 40]), our intent here is to develop perspectives that are grounded in the shared corporeal and social experience of place-neighborhoods, civic groups, and public associations. By attending to the shared histories that are not solely mediated by technology, we can begin to trace the physical and social and moral encounters of individuals and institutions [47]; the enactment of heritage via the departure and return of diaspora [8]; and the means for negotiating and contending with shared issues and social conditions [32].

The consequence of our perspective on community is the enmeshing of "practical dependencies of living in proximity with commitments to shared purposes and meanings" [11:308]. It gives us purchase from which to examine the social mechanisms that lead to moral or normative communities and the material and psychological conditions that are involved in both [11, 37]. Furthermore, proximate communities provide local settings from which to understand institutional relationships and the implications, limitations, and affordances for technology-mediated democratic discourse [45].

Within this broad context, we are concerned with the relationship between qualitative methods and design research that seek to explicate a community setting. Two points in particular drive our turn of attention: the need to make explicit the ways in which the field site is constructed through the *in vivo* negotiations and interactions with community members; and the need to engage with the multi-sitedness of community-based design and research where the plurality of community comes in contact with the need for structure and constraint. By turning our attention to how we entered a community, we are developing an account that both provides insight into the social dynamics of different kinds of communities and provides an opportunity for critically reflecting on social and technical experimentation through design.

Reflexivity and Constructing the Field Site

Blomberg and Karasti point out that in ethnographic reports within CSCW, "the more subtle ways in which the field site is continuously constructed remain implicit and unarticulated" [5:390]. One of the consequences of not engaging with how we construct field sites is that binaries of work/ non-work remain unexamined [5]. A more relevant consequence here, is that in the absence of a single organizing principle—*e.g.*, a workplace and professionalization—the boundaries of the field site are less readily apparent and are more easily contested.

If, for example, we ask questions about office workers—wanting to understand hierarchical and procedural work settings (*e.g.*, [2, 27])—the office and the professional work provide pragmatic affordances for bounding the site of inquiry. On the other hand, if we venture away from professional practices (*e.g.*, [6, 41]) then questions about who and what compose the site, what kind of work, and the means for accomplishing it no longer have ready-to-hand answers. In both cases the boundaries can be interrogated, our contention here, however, is that in community settings, we need to pay particular attention to how we construct our field sites because there is no simple way to signal via organization or work practice what those bounds might be.

One tactic for examining how field sites are constructed is to turn to reflexive accounts of the research in order to engage with the role of authorial voice and subjectivity when conducting and reporting ethnographic work [17, 42]. What these accounts provide is a map of how the research developed, the ways the field site was constructed, and a more explicit sense of how such work may be carried out that neither relies on prescriptive descriptions of method nor on the frank exposé of serendipity and good luck [24].

An important, but often omitted part of ethnographic work is what Harper calls "initiation rituals" [24]. These rituals have much in common with the what McMillan and Chavis describe as part of gaining community membership [37]: they both draw on the affective and moral connections necessary in order to become an insider in a field site or, more broadly, a community. Harper is less concerned with the way these rituals shape the research site—arguing that while an important and often interesting piece of the research, the question of whether or not to "go native" is a moral and not an empirical question [24]. We would disagree on this point, as the work of gaining access to a community shapes the empirical work in pervasive and important ways. It is not just that being initiated and building rapport lend moral authority to speak about the site, the process determines, to a greater degree, what will be spoken about.

The larger point here is that the choices researchers make when interacting with a research site are integral to the method and its outcomes. Exposing these elements positions the researcher within the social hierarchy of the context, providing a better understanding of the site and the researcher's influence over the events that comprise the ethnographic report. Doing so also contributes to a shared understanding of how the research developed over time and contextualizes the establishment or deterioration of relationships between researcher and subject. With few notable exceptions [15, 30, 50], such reflexive discussions are often completely absent and are rarely pivotal to how we discuss our research.

Omitting reflexive accounts can be viewed as a way to establish the interpretive omnipotence that enables a representational authority. It also obscures process-oriented insights that could be gleaned by researchers not involved in the reported study. As we embark on research in community settings, articulating the intellectual and political commitments of the researchers are important to its reportage because these commitments often serve as a kind of infrastructure for the work. Moreover, the lack of reflexive accounts impedes progress in terms of evaluating knowledge production, gauging rigor, and advancing method as we continue to expand the contexts of inquiry and the multidisciplinarity of our research [5, 10].

Before and After Method

By taking seriously questions of how our field sites are constructed, and the consequences that construction has on both the process of our research and on the subject of it as well, we begin to engage with what Law has called the multi-sitedness of research where the many different professional and cultural practices of different stakeholders become entangled [31]. Through this entanglement, we are confronted with a complex set of locations where analysis and knowledge are made material-through the creation of field notes and other records, the development of technical artifacts, scholarly analysis, and the multiple practices of writing up. Law described these multiple locations as distinct along particular lay, professional, or disciplinary practices -e.g., in one of the case studies Law presents, the production of atherosclerosis is enacted over many sites: "the clinic (which can be divided between the patients' complaints and the physical examination); the pathology laboratory; the radiology department; duplex [the use of ultrasound to detect blood-flow]; and the operating theatre" [31:50].

Design researchers in community settings similarly occupy multiple sites, serially and in parallel, as a matter of course in conducting their research. It is the negotiations across these sites that shape the interpretive act as researchers navigate the course of conceiving, developing, and running community-based research programs.

The issues we are contending with here have been present in different disciplinary discourses for some time, though their integration into computing research has only occurred more recently. Taylor, bringing Law's argument to the HCI literature, makes a compelling case for attending to how the dominant metaphors of relation, and our subjective position as researchers with commitments to viewing the technical in the social, shape our discursive scholarship on context, culture, and communication [43].

The challenge for research in community-contexts is to productively engage with the mess, recognizing and explicitly embracing the view that "methods [no longer] discover and depict realities... they participate in the enactment of those realities" [31:45]. To extend the points made above, researchers do not just construct a field site, but many field sites as they participate in the selection, connection, and bounding of a particular context [5]. Building out from this perspective, we can point more specifically to the multiple subjectivities that are enacted through community-based research. These subjectivities not only shape the research agenda, guiding the formation of questions and contextualizing those questions in ways that bear relevance for both researcher and community, they demand the researcher occupy different subjective perspectives throughout the process: researcher, confidant, advocate, interloper, invader, and collaborator.

It is within this frame of presenting a reflexive account to explore how a field site was constructed that we turn to our concern with design research and community-based participatory design. Introducing a reflective and critical account of how we developed a field site is an important part of acting on our commitment to co-construct the research agenda, and not just the research product, and to support a radical position of community empowerment and democratization [4, 13, 20].

COMMUNITY AS RESEARCH SITE

Our research agenda at the outset was to examine the role of, and co-produce systems to support community and civic engagement. We chose to engage a community close to our university to begin developing a new university-community partnership as part of a larger university-wide effort modeled after the Netter Center at the University of Pennsylvania to more constructively partner with neighboring communities to address economic and social disparities [23]. There were two additional factors that guided our choice of research site: first, we wanted to engage with a community with rich historical and cultural legacies in our city; second, our research was, and continues to be, guided by principled commitments to social justice and considering the role of technology in supporting participation in *all* communities, regardless of socio-economic status.

Moving forward with our three considerations, we began our work in a distressed, predominantly African-American neighborhood that abutted our university. The neighborhood was close to Atlanta's urban core, was adjacent to multiple culturally and historically diverse universities (in addition to our own), and was bordered by several international corporate headquarters along with the city's downtown. The substantial economic, social, and cultural activity occurring around the neighborhood stood in contrast to the conditions within the neighborhood: more than 50% of properties in the neighborhood were vacant; public infrastructure was inadequate or failing; a large portion of the community lived at or below the poverty line; and the attendant socials ills of drug dealing and use, prostitution, and petty and violent crime were common and conducted in the full light of day.

Despite the current state of decline in the neighborhood, its history was rich and deeply connected to both local and national social movement for racial equality that occurred through the end of the previous century. Several prominent leaders of the Civil Rights Movement lived in the community and organized in the neighborhood during the 1950s and 1960s. Many of the local marches and events that took place during that time were planned and staged in the community. There were also two racially-motivated bombings in the community: one at a home and another at an elementary school. Once desegregation was enshrined in law, there was a dramatic demographic shift as white-flight took hold, and a community that had been previously majority Caucasian became majority African American: by 1970, over 99% of residents identified as African American [7].

Over the following decades, several confounding events contributed to the erosion of the community. Immediately following desegregation, institutions like the neighborhood's Carnegie Library and an anchoring elementary school saw their use rapidly decline and were eventually closed. Economic growth was eventually stifled after the completion of a large conference center and professional football stadium. The new complex severed roads that provided east-west access to downtown and resulted in the isolation of the community. Contemporary issues include chronic problems with failing city infrastructure—particularly storm drainage and water issues—high vacancy rates and abandoned buildings, illegal dumping, and unaddressed requests for the paving of dirt roads.

The current situation bore the signs of a disenfranchised community; largely invisible to local government, residents were not politically engaged and apathy had been cultivated over time because local activism rarely resulted in desired outcomes within the neighborhood. A great deal of distrust and a prevailing suspicion of outsiders was also present—the motivations of outsiders were questioned in light of decades of broken promises and failed projects. This distrust was particularly acute for individuals from our university with whom the community's experience had alternately been as research subject (objectified and studied from afar) or as undesirable neighbor (a drug and crime and prostitution problem the university wanted fixed).

These factors informed our efforts to build robust relationships with community partners, and more crucially, they informed the re-framing and calibration of our goals and our understanding of what a successful outcome would look like for all parties involved. The research we were undertaking was not just about the issues of exploring digital tools for civic and community engagement, it bore the weight of institutional and racial legacy: we were uppermiddle class caucasian researchers from a wealthy (and paternalistic) neighboring university confronting realities of the systematic disenfranchisement of a poor, African-American community. What became clear very quickly was that our goals of working with the community to cultivate shared identity and raise the voices of individual experiences was secondary to the issue of how we intended to work with the community to reach those goals. Moreover, that how-the procedures and protocols, the design work and technology building-had to be determined by the community and not simply imposed by our research agenda.

Context & Method

The following account developed over the course of two years of ethnographic fieldwork in the community. Our field work comprised participant observation, semi-structured interviews, and design workshops; these activities were carried out in a diverse range of settings, including neighborhood association meetings, public street events and festivals, non-profit organization meetings, and private homes.

We were involved with institutional and organizational settings within the community including: the neighborhood association which met monthly to discuss present issues and activities in the neighborhood—reports on public safety and development projects were the primary focus of these meetings; the Neighborhood Planning Unit which was one of a formalized citizen advisory board for all planning decisions in the city, including development, zoning, and land-use; finally, we entered a partnership with a local cultural arts non-profit with whom we developed and ran the design workshops focused on documenting and reflecting on community identity [20]. In addition to the design workshops, we participated in multiple community events to showcase artifacts from the workshops as well as to demonstrate good faith and solidarity as a conscientious neighbor.

Our field documentation included audio recording and carefully compiled hand-written notes along with artifacts and documents developed as a result of the planning and running of the design workshops. These materials collectively form the basis for our ethnographic account, motivating our reflection on the multiple roles we inhabited as we developed a set of relations—research-based and personal—in the community.

A JOURNEY OF A THOUSAND MILES

When we began our engagement, residents were skeptical of our motives, interpreting our presence as another instance of objectification and exploitation. It was only through a slow and fitful process that we were able to overcome the institutional momentum of "mining" the community as a research site and develop a discourse of what partnership could and should look like between our university and the residents, organizations, and institutions of the community.

While we entered the scene with ideas of supporting community and civic engagement, we did not know what form that might take nor what particular issues the community was contending with. We had notions of what kinds of issues the area was facing based on the apparent physical conditions and our understanding of how it had been represented in the media as a place to be cleaned up. Despite these apparent problems, we began our enterprise with a commitment to focusing on issue formation [33, 36], allowing for the individuals and institutions we encountered to frame what was, and was not, important.

Our measured approach to entering the community began with attending monthly neighborhood association meetings. The neighborhood association formally included our university due to a shared and overlapping geography, however, the university's presence in the neighborhood was perceived as a paternalistic institution rather than community partner. As such, when we began attending the neighborhood association meetings, we were immediately identified as being from the university—there was no blending in or "hanging out" to quietly build rapport as our affiliation with the university defined our identity and ascribed a legacy of motivations.

Establishing Presence

As highly visible outsiders, we attended the neighborhood association meetings to begin building familiarity. Familiarity for the residents of the community so they could gradually get to know us, as well as familiarity for ourselves as we began to pay close attention to the social and authority dynamics within the neighborhood. Through the first few months, we learned a lot about the organizations of the neighborhood and the concerns and issues that were habitually raised by elected members of the association as well as members at large.

We learned that public safety issues were important and always brought up during the meetings; however, they were generally tacked on to the end of the meeting and given little time. Incidents, concerns, problem locations were quickly listed, but there were no detailed discussions about how to address the problem or action the police or other authorities might take. The facts of drug dealing and the associated violence were not an outrage to those attending the neighborhood association, instead they were a part of daily life in the community. Moreover, as one resident expressed early on, the drug dealers, gang members, and prostitutes were often the sons, daughters, nieces, nephews, or grandchildren of the very residents at the meeting, and while no one could condone their actions, they needed to be met with love and support as one would offer a troubled member of the family.

We also learned of visceral tensions within the community around the use and distribution of resources. At the first meeting we attended, a member-at-large continually confronted the then-president of the association of fraud and embezzlement. The issue stemmed from an employment contract for event support where the individuals who worked the event had not been paid (or not paid according to their expectations, the details remained clouded). The contract had been negotiated and executed by the association president and there was an apparent history of distrust from some quarters of the community that he had long been using his position, both as association president and as church leader, to enrich himself.

The rift over accusations of fraud split the meeting largely along lines of members-at-large uncertain about the veracity of the association president's claims, and other community leaders, including a State Representative, stepping in to vigorously defend the association president.

As outsiders, the events and discussions that occurred during these neighborhood association meetings pointed toward opportunities for exploring the tools we might build to support the community. There was an apparent need for ways of documenting physical conditions to enable the community to catalogue and contend with the problems like illegal dumping, absentee property owners, and public safety. At the same time, issues of transparency and accountability seemed like more contentious points of entry to explore ways of building stronger ties within the community. Beyond any specific project direction, however, our initial observations merely helped us begin to build a vocabulary for speaking about the current conditions in the neighborhood.

Choosing a Partner

After three months of attending community meetings, we began a series of interviews and project-scoping meetings with the director of the neighborhood association. The director had a distinct role from the president of the association in that he was paid a modest stipend and was meant to be the stable functionary who ran the volunteer efforts and who attended planning and zoning meetings in order to act in a limited fashion on behalf of the neighborhood association.

Our meetings with the director were to explain our broad research goals of running a participatory design project to explore and cultivate local forms of community engagement. Based on our time at the neighborhood association meetings, we suggested issues of public safety and city infrastructure as specific areas that seemed of concern to the community and outlined strategies for exploring them through participatory design with the dual goal of creating a more specific dialog with the community about particular issues and producing new tools and skills for contending with those issues.

It took several meetings with the director to explain our approach and to understand his perspective on how community-centered projects should be run. It became immediately clear that he was more familiar with public health research that was commonly conducted in the community. As such, he had expectations around participant compensation and the kinds of financial support that might be forthcoming; for example, a public health project run out of another local university had supported community liaisons with a substantial annual stipend along with per-participant compensation. Additionally, the director persistently asked that we commit to establishing scholarships for students from the neighborhood; that we commit the university to hiring people from the neighborhood; and that we commit to writing grants that included community staff positions and stipends like the one he was currently collecting as the director of the neighborhood association.

At the onset of the project, we did not have access to resources that would allow us to provide compensation at the level that was being suggested by the director. We were not opposed to pursuing funding opportunities to do so—such tactics have proved successful in other venues [3, 48]—but wanted to first develop a working relationship with a community partner in part to more clearly define how such support could be productively sewn back into the community. In the mean time, we outlined our commitments to working *with* the community, building design encounters that would eventually result in working systems supporting community goals and engagement. In support of our position, we offered up examples from our previous work to show how the design process worked and that real, working systems resulted and would be provided to the community.

After a series of meetings with the director, he agreed to give us time at the following neighborhood association meeting to explain the project and solicit volunteers who would be interested in working with us. Even though we did not have complete resolution for many of the financial requests that came from the director, we agreed that we would begin the project and continue to look for creative ways to build in more direct support in the future.

What Does Not Kill The Project...

When we presented the project at the neighborhood association meeting, we provided a brief overview of our desire to work with individuals in the community to explore ways to support and broaden community engagement. The initial pitch was aimed at recruiting community members for a short photo elicitation activity for documenting the kinds of neighborhood problems we had heard discussed in prior meetings-issues of property, infrastructure, and public safety-and which would form the basis for future participatory design sessions. Immediately, we fielded questions and concerns from the residents at the meeting: questions about who would participate and how that participation was related in any official way with the neighborhood association; concerns about the intent of the work derived from past experience with photo-based public health work; skepticism of its potential value to the community because the final system or artifact was not something we could clearly articulate as its form and function would ultimately result from the project.

We responded to the questions and concerns by explaining anyone could participate and that our connection to the neighborhood association was an informal collaboration and venue for reaching out to residents; that our intent in working with the community grew out of our own commitments to working with low income communities who have traditionally been marginalized by standing institutions and re-development efforts; that the value to the community would come through both the participatory design process and the system or artifact that we created together.

The reaction to this short, and to our mind straight-forward clarification of the project, was swift and certain. Two community leaders in attendance-one of whom was the State Representative we encountered earlier in our fieldwork, the second the chairperson of the Neighborhood Planning Unit, an Atlanta-specific civic structure for citizen oversight on issues of land-use-took issue with our presence at the meeting, our vocabulary in speaking broadly about "low-income" and "marginalized" communities, and the lack of specific details on how the community would benefit. The result was a motion raised, seconded, and unanimously voted for in-favor that the association not support our research project (including strong language discouraging individual participation), that no further discussion move forward until they had a meeting with the university president that resulted in a master agreement, "institution to institution," between the neighborhood association and the university, and that these conditions be delivered in written form to university administration.

Earlier successful community projects had conditioned us that a reasonable approach to starting a project included providing a broad-strokes outline of our approach and letting curiosity and a benefit of the doubt (perhaps conferred by the association with our university) fill in the initial gaps. However, in this instance, we were faced with a legacy of particular kinds of community relations enacted by our university that had foreclosed the very notion that mutually beneficial collaboration was possible. The community had been the object of study for so long, and the faculty and students had entered the community only to carry off the riches of research and knowledge production for so long, that there was no benefit-of-the-doubt to be found. Our arrival, and attempt to try something we thought would be new and genuine was dismissed and then parlayed into a larger set of issues in how the university related to and supported the community.

The issues of scholarships, employment, and institutional relationships were far more pressing than this small project, and our presence became an opportunity for those issues to be made visible. Our relationship to the community had gone from innocuous outsider during initial observational fieldwork, to interloper once we attempted to build a working collaboration. The strategies we had thought to deploy in order to build a mutually productive collaboration were legitimately called into question and placed within the historic context of the community's experience with research. And while our overarching goal was a participatory design project, it was still interventionist and positioned the participation only with respect to the design of the research program itself.

Being Chosen as a Partner

Following the neighborhood association meeting, the technical assistant from a community cultural arts organization asked that we contact contact her to further discuss the project. Despite her expressed skepticism during the association meeting, she told us she recognized the potential for the work to contribute to her organization's agenda of empowering the community through culture and the arts.

Her invitation lead to a new set of meetings that took place over a period of about eight weeks. During those weeks, we met at her home to discuss a potential partnership, the theoretical basis of our research, and our commitment to community partnership. We were asked about our religious beliefs-not as a moral test, but to establish clear language by which to communicate. She identified herself as a former Marxist and a liberation theologist who had been trained as a nurse. We openly discussed issues of race and privilege and she suggested that we read the Pedagogy of the Oppressed and The Wretched of the Earth in order to help frame and motivate our work with community members. Our meetings together were kept confidential because our presence in the neighborhood remained contentious. And during this time, it was also made clear that our discussions were person-to-person and that she was not yet acting on behalf of the cultural arts organization she advised.

These meetings formed the basis of a new collaboration, one that grew out of a set of shared commitments to community and human development, and one that was based first in a ground-up desire to try something new, rather than a top-down attempt to secure resources. It was only after we had developed genuine rapport did she agree to present the collaboration to the board members of the cultural arts organization. Unlike our previous experience at the neighborhood association meeting, we were not directly involved in this process. Instead, she advocated for the project to her organization's leadership.

Presenting the project to the board in our absence meant we had developed a shared understanding of the project and the intended goals. As researchers and academics, it also meant ceding considerable control over a situation that might again turn against our proceeding with the project. The board voted in support of the collaboration and we began in earnest to do two things to cement the collaboration. First, we co-authored a Memorandum of Understanding (MoU) with the president of the board; second, we began the work of co-developing the research plan.

The MoU established an official relationship between us and the organization and summarized the obligations we had to each other in the project. It also outlined foreseeable benefits that might arise from the collaboration and clearly articulated how we would return benefits to the participants and the community at large (whether through on-going funding, or local opportunities to present the work). The cultural arts organization agreed to manage volunteer recruitment and development and to provide space in the community for design workshops and future meetings. We committed to providing all technology resources and training necessary to conduct or participate in the workshops and to lead grant proposal development and management. The MoU formalized a commitment to each other and to plotting the course for a new kind of collaboration between our institution and a local organization in this particular community.

More important than the MoU, however, was the collective turn to co-developing the research plan for our project. Our broad goals were still in place—we wanted to work through the challenges and opportunities for co-designing and deploying community-focused technologies to support local engagement and different forms of civic action—but instead of beginning the participatory process at system design, we shifted and began the participatory process at research design.

One of the more productive tensions grew out of a mismatch between our expectations about how the project would develop and our collaborators' expectations of how community members would benefit from working with us. We were accustomed to environments where the benefits of research were realized over time through analysis and reflection; our community partners wanted to ensure that participation resulted in an immediate benefit for community members—if we asked someone to spend two hours with us, then we needed to articulate what they would gain from those two hours, and not just what our goals for the workshop were. This pushed us to co-design the workshops with a focus on benefit through design process, rather than from a resulting design artifact or our analysis.

Working through how to match our research interests with the concerns of our collaborators meant adjusting how we developed our research agenda. Not only were we codesigning the workshops with our collaborators in order to provide a worthwhile experience for individuals participating in the workshops, but we also had to re-imagine the temporal aspects of our planned research and be concrete about how each workshop would be conductive both to our desire to contribute to particular research communities and attend to the immediate desire for benefits—specifically, benefits that could be connected to forms of empowerment—for community members involved.

Ultimately, we shifted the focus of our research aim from documenting issues we had identified, to developing a series of workshops to explore individual experiences in the neighborhoods and to connect those experiences to the history and heritage of the community. Each workshop had concrete outcomes for the participants along with outcomes that we wanted to achieve; we developed a plan that included public presentations of the work as a way to build toward a larger participant-centered goal of raising their voice within the community; "participants" became "Community Historians" to make clear a relationship that was not subjecting the community to research, but building a project around individual and collective agency. Most importantly, research that initially conceived of civic engagement through the lens of institutional relationships, public services, and specific kinds of collective action was reshaped with the guidance of our community partners to understand

engagement through the creation and enactment of community identity—through the responsibilities and accountabilities focused within, rather than those directed toward external agencies and authorities.

Keeping the Faith and Continuing the Work

Having worked over the course of months to build rapport with our community partners, to develop our research plans and then to begin holding workshops, we had accomplished something substantial. But beyond the work done to build trust and rapport with our community partners, there was a need to constantly maintain that relationship as the project progressed over the next 18 months. During that time, community historians often questioned us about things like our professional affiliation, our age, home address, hometown, as well as questions about personal or private information like our parents' names, their jobs, and whether we were given cars when we turned 16. Being asked to disclose things about ourselves that we would not typically share made us feel unusually vulnerable. However, these questions and the vulnerability they elicited enabled us to move from a position outside the community to one within the community and ultimately were an important part of the shared commitment to the project: we were meeting in the home of the cultural arts organization's technical assistant, we were asking the Community Historians personal questions about current and past experiences in the area, and we were probing issues of socio-economic status, authority, and power relations. On reflection, it was only natural that we would be asked to share similarly personal experiences.

The reason such questions stood out to us at the time, however, was due to our expectations and experiences of entering field-sites developed through largely professional settings. Becoming an insider in ethnographic work in the workplace occurs under the professional boundaries of workplace etiquette; becoming an insider in a community context requires different kinds of etiquette and operates within different boundaries. Our community partners, like other community members, continued to question our presence in the neighborhood, even at later stages of the project. These questions were often as much about clarifying a particular technical point about the workshop as they were about reaffirming the shared commitments that formed the basis of the partnership. Ultimately, the personal connections we formed were the most important part of the work; the collaboration was built on an understanding of traveling a journey together, and both sides occasionally needed reminders of what "together" meant.

The journey to becoming an insider and developing a rich community partnership was not just about gaining trust and building rapport: it shaped the research from the questions we finally set out to understand to the ways in which we went about developing that understanding; it exposed our own assumptions about what it meant to be in a community and act civicly; and it gave us the opportunity to confront the realities of community-based research where the success or failure of the project with respect to the community is often orthogonal to the success or failure of the project with respect to the research.

DISCUSSION

By articulating an account of how our community partnership developed, we aim to shine a light on the mess in community-based research and design and connect that mess to a productive discourse for how to further develop disciplinary and practice-based approaches to conducting community-sited design research. As we have set this paper up as a reflective ethnographic account meant to better understand the research site, we now want to turn more explicitly to the challenges and opportunities of relating such an understanding to modes of design.

Participatory Design in Community Settings

Community settings are explicitly plural and a mix of motivations, histories, and goals which bring different individuals and organizations together in complex ways. This plurality is the primary practical difference between community-based participatory design and participatory design in the workplace where work and commercial enterprise organizes constituencies around clear authority relations, incentives, and obligations. Within community settings, Carroll points to the absence of similarly explicit authority dynamics as a defining difference between participatory design in the workplace versus in the community noting that, "an important contrast between workplace and community informatics is the absence of 'us' and 'them.' No one is 'boss' in a community" [13:249]. We agree that community-based research necessarily needs to engage with a ground-up effort to build capacity and support local initiative, however, we would contend that community settings may be more productively described as multiples of "us'es and thems," where the single narrative of authority and power found in the workplace is replaced by multiple and overlapping domains of influence and conflict. Given these complexities, the work to develop a field site and research project is largely about navigating those connections in order to create productive collaborations.

More than simply finding the right community partner, however, we want to point to the explicit need to develop research plans together. There is a strong case to be made for participatory design's place in developing rich community-based interventions [4, 13]; there is a compelling legacy upon which to draw for engaging in political and emancipatory practices [1, 18, 35]; there are clear examples of how such work can succeed in developing novel design approaches and working systems (e.g., [14, 20, 34]; and there are accounts of how participatory design can be evolved to contend with alternate power and authority differentials in global settings [38, 49]. Each of these point to clear ways communities can be productive locations for research, and more importantly how that research can be productive for the community. What is less visible is how that work came to be, the negotiations through collaboration, and the co-creation not just of the final technical artifact, but of enacted method and analytic lens [31].

Locating and Translating Contribution

In the process of building a community partnership, we had to make an important conceptual reversal. When we began the project, we had sought to frame community contributions in terms of the kinds of advances we might make through the research. The tension this created was not so much about whether the research would be of value in the community, but that it perpetuated several prevailing and negative perspectives on the community. By starting with research contribution, our attention was inadvertently drawn to particular kinds of issues, and to particular kinds of relationships with respect to what it meant to be engaged in the community.

Our method had continued to enact certain realities in the community [31], realities that we had in fact set out to challenge through our commitment to developing tools for community and civic engagement. What we missed in seeking acute or instrumental problems against which to pitch design and technology was that membership in the community could not be defined by as a "singular loyalty, identity and belonging," but had to consider the "new 'sites', 'scales' and 'acts' through which 'actors' claim[ed] to transform themselves... into citizens" [28]. It was this complex relationship between the individuals with whom we were working and the alternate enactments of community identity that both caused us to stumble as we began the project, but which would become a very productive avenue for building a community partnership and coordinating design activities [20].

The reversal that enabled us to develop a working community partnership was the move to situate our contribution in terms of the local community instead of the research community. Even to the point of whether to pay community members or not, our partners pointed out that volunteering was an important kind of engagement, one that reflects commitment to the community. It was around this set of priorities, to cultivate commitments to the community, that we came to focus on the workshops themselves as a form of engagement: an end, rather than a means. This point is important because it puts into relief the many ways engagement might be enacted. Treating community-based research projects as a means to engagement-by producing artifacts and systems that ostensibly support community goals-is only one way such relations can be created. As alternate visibilities of engagement came into focus, our responses to the work shifted.

Ultimately, this reconfigures method, where ethnography and design workshops are typically deployed to shape the design of an interventionist artifact, here those activities were the artifact, revealing and creating the boundaries of the community and the means for being engaged. Much of what we encountered illustrates Blomberg and Karasti's point:

"Researchers and designers are finding themselves in new terrains and unaccustomed positions with respect to the 'subjects' of study and to the design of the sociotechnical systems in focus. This argues for increased flexibility (at times interchangeability) in roles vis-à-vis the dual ambitions of 'theorizing' about the organization, including the structuring of cooperative activity and 'participating' in shaping future (design) possibilities" [5:406].

Oscillating between theorizing and participating allowed us to see where our assumptions had created blinders with respect to community identity and engagement, and pushed us to develop a dialog and vocabulary within the community that enabled translation between the goals of community engagement from a perspective on the ground, to the goals of community engagement as a topic of research. The challenge for us became translating the community contribution into research instead of translating the research into community contribution.

A Productive Mess

Our intent in sharing a more discursive and reflective account of our fieldwork is not simply to recount a tale of personal struggle when working in a challenging research setting, but to bring to the discourse the realities of what such work entails. The familiar subjectivities we occupy as researcher, those that we impose on participants, and our comfortable reliance on technology are left far behind when embarking on work in community settings. It has become an aphorism for recent research that lo, we have left the workplace and things are different. This is an incantation we have been guilty of ourselves; however, the differences are not simply confined to the social context, or the kinds of technologies we might encounter, nor to the methods we might use to mediate our understanding of context and technology. They are expansive and include the relationships we inhabit as researchers in these settings. We are variably researcher, confidant, advocate, interloper, invader, and collaborator. Moving between these roles is difficult and rending work that is necessary for community-based research to succeed, but is rarely part of how we talk about that research. Even while we include details of participants or research site, we do not tend to frame our findings with our own personal accounts so as to give depth to our insights, or add length to the shadows of our forecasts.

Taylor, in pointing to the default positions taken up by studying contexts and communities "out there" raises important points about how the work we do in social-science informed computing research is often that of othering, of making strange mundane practices in order to gain some incremental insight into the totality of global relations to our familiar technologies [43]. The flip side to this, of course, is how we are positioned as "the other" by community members with whom we work. The point of community based research, called variously participatory or action or value centered research [4, 21, 26], is in part a move to embrace the subjectivity as researcher so as to be aware of the assumptions and perspectives such a subject position imposes within a given social context. And to a greater extent, the appropriation of social-science methods in computing has managed to create an ongoing discussion about how we account for our own perspectives in technology-driven research.

What is less well discussed, less well understood and incorporated into how we operate as a discipline, is how we account for the subjectivities to which we are assigned, not by ourselves as researcher or collaborator, but by the communities in which we work. We are often continually balancing scales of institutional authority with personal connection, where we may be setting aside principled philosophical differences in the service of access, and where each of these inform what we attend to and what we ignore; what we note as remarkable, and what we dismiss as unimportant; what we see as positive change, and what is disappointingly admitted as not having made a difference.

As computing matures in its use of social-science methods, and as it embraces the mess that is encountered out there (and in here, and right there) [31, 43], we need to have ways to to account for the multiple narratives we tell about our research. As we continue our encounters in non-technocentric contexts, where the focus of research might shift from building a thing and making it usable to questing whether to build the thing at all, we need a vocabulary for talking about these challenges. Much as design research has grappled with how to disclose and discuss design failure as a rich source of learning and insight [22, 32], we need to similarly grapple with how to make visible the work before the work, and the work to keep the work going, so its role in shaping the research and the outcomes of research are made more accessible.

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