

Supporting Everyday Philanthropy: Care Work In Situ and at Scale

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ABSTRACT

Prior research has drawn attention to numerous problems with ICTs designed for philanthropic contexts. Yet, little is known about how to support philanthropic work in its own right, especially as it transcends formal engagements with nonprofit organizations and suffuses everyday life. In this research, we draw on data from a 33-day mobile diary study augmented by follow-up interviews to examine the work of everyday philanthropy. By taking individuals' philanthropic work—rather than a specific technology or its users—as our unit of analysis, we establish an empirical foundation for a new design space for philanthropic informatics. Our research shows that philanthropic work is not just about transactions of money, goods, or services. Instead, we argue that a lens of care work is a more useful framing of everyday philanthropy. We also draw renewed attention to the myriad roles of institutions beyond that of a resource intermediary.

Author Keywords

Philanthropy; Nonprofit Organizations; Care Work; Work Studies

ACM Classification Keywords

H.5.3. [Information Interfaces and Presentation]: Group and Organization Interfaces—Computer-Supported Cooperative Work

INTRODUCTION

Recent years have seen an increase in computing technologies designed for philanthropy, from volunteer matching sites to crowdfunding tools. Yet, as CSCW researchers have shown, these computing tools are characterized by numerous shortcomings (e.g., [22, 50, 55]). For example, members of the nonprofit sector report that trends towards micro-volunteering misunderstand and thus undermine the broader objectives and impacts of their organizations [55]. Technologies meant to make social

services more efficient, instead, introduce new overhead and require new kinds of intermediary service provision by nonprofit organizations [22]. It is clear that computing technologies do not yet well-support philanthropic work.

Successfully designing computing technologies to support philanthropy requires a better understanding of the nature of philanthropic work as it is carried out in situ and at scale. Prior research has two critical limitations. First, it has focused on examining philanthropic uses of individual technologies—such as crowdfunding [50] or social media [55]. While helpful for identifying and characterizing the problems with these tools, such work is less well-positioned to help us understand philanthropic work as a complex, situated and social practice in its own right—as it does and does not already include technology use (see [5, 41, 58] on the importance of looking beyond use). Second, prior research has focused on studying formal philanthropic work—advocacy, volunteering, and giving—as it is enacted with and through nonprofit organizations (e.g., [20, 53, 55, 57]). Scholarship in philanthropic studies, however, cautions that an overemphasis on the nonprofit organization as a unit of analysis fails to account for the myriad informal ways that philanthropy is a situated practice that extends beyond and, indeed, precedes organizations [42]. Building an empirical foundation for future philanthropic design thus requires scaling up our unit of analysis from the isolated tool, task, or nonprofit organization.

In this research we follow in CSCW's rich tradition of work practice studies [40], by focusing our attention on individuals' philanthropic work as it transcends myriad institutional contexts and as it is more generally constituted and contextualized beyond any computing system and its use or non-use. Drawing on data collected through a 33-day mobile diary study augmented by follow-up interviews, we examine the philanthropic work of 35 Midwestern American adults and highlight three key findings relevant to CSCW.

First, we find that care work is a productive lens for understanding philanthropic work, particularly as it transcends the informal/formal divide. ICTs designed for the philanthropic context have embodied a model of philanthropy as charity, a transactional kind of work centered on resource (re)distribution (see also [23]). By contrast, our research shows how the philanthropic work of our participants might better be characterized as falling along a continuum of *care work*. Our research begins to map the

contours of a design space for a new class of philanthropic technologies that aim to support these forms of care work as they are multiply situated in everyday life—and extend far beyond formal instances of nonprofit-affiliated advocacy, volunteering, and donation. In drawing attention to this case of care work, we also contribute to the growing body of HCI and CSCW scholarship examining care (*e.g.*, [7, 18, 34, 52]) and building on a longer legacy of scholarship drawing attention to invisible work [47, 49].

Second, our analysis of philanthropic work draws renewed attention to the diversity of roles that formal organizations play in supporting philanthropy: extending the reach of care work beyond personal social networks, enabling the continuity of care work, and supporting important forms of behind-the-scenes articulation work that make philanthropy possible. These roles expand the narrow design space evidenced by existing technologies that understand philanthropic organizations as transactional facilitators of charitable resource redistribution. Indeed, existing tools often aim to streamline, augment, or replace the nonprofit organization with more ‘efficient’ resource redistribution platforms. By contrast, each of the roles we highlight suggests new possibilities for design that affirms—rather than replaces—institutions and organizations. In particular, the role of collaborative computing stands to be paramount for broadening networks and expanding comfort zones.

Third, and more broadly, our research serves to echo too-often-ignored calls for CSCW researchers to re-engage with units of analysis rooted in human practice as it crosses multiple social situations and is neither limited to a specific task nor a specific technological use case. By approaching the study of everyday philanthropy in a manner unconstrained by the scoping of now-more-typical units of analysis—centered on tool users and tool use—we move beyond technological critique to find a new vantage point over a design space in which questions of philanthropy by and for whom arise from the relationships among individuals, collectives, and organizations.

RELATED WORK

Everyday Philanthropy

As computation has begun to permeate all sectors of society, computing researchers have shifted research goals from supporting the technical requirements of office information systems to supporting those of everyday computing [1, 10]. These researchers have explored form factors of technology at multiple scales and in ever more mundane contexts and unremarkable ways [1, 51, 56].

A similar shift in research framing has recently been advocated by researchers in philanthropic studies. Schervish and Havens argue that too much emphasis has been placed on studying individual interactions with formal nonprofit organizations, leaving more everyday forms of philanthropy understudied and underestimated [42] (see also [56]). These researchers have drawn attention to the importance of

understanding philanthropy as something that permeates social life and occurs at multiple scales—ranging widely from small loans among family and close friends to major endowments by the wealthiest citizens. Attending only to the study of formally-affiliated philanthropic acts stands to marginalize and devalue smaller or more nontraditional forms of giving and volunteering, no less important to their beneficiaries and society at large. Without research that takes a broader unit of analysis, the prevalence of philanthropy and importance of ‘doing good’ in the everyday lives of individuals is underestimated.

In this research, we respond to philanthropic studies scholarship by exploring philanthropic practices broadly. We also return to the nuanced understanding of the everyday drawn from researchers in ubiquitous computing—open to philanthropy as being woven into the fabric of everyday life at multiple scales, through multiple form factors, in formal and informal, remarkable and unremarkable ways [1, 51].

ICTs and Philanthropy

New collaborative and ubiquitous computing platforms and applications have emerged in recent years to support philanthropy. Infrastructures supporting mobile giving, like the Red Cross’ txt2help, have raised sizeable amounts of money in small increments in the short periods of time following natural disasters. Platforms like Sparked help to match potential volunteers with microvolunteering opportunities (see also [9]). Researchers have also drawn attention to the uses of general purpose social computing platforms—from twitter to mobile phones to crowdfunding tools—in service of philanthropic endeavors [48, 50, 55]. Social computing technologies, in particular, have been heralded as allowing individuals to engage in philanthropic work without the need for intermediary philanthropic organizations [44].

Yet, there are numerous problems with the use of these tools. Nonprofit organizations struggle to use technologies—from e-government websites to databases to social media—that have not been designed to accommodate the kind of bridge-building work that society relies on the nonprofit sector to carry out [22, 54, 55]. Researchers have also raised fundamental questions about the understanding of philanthropy assumed or embodied by ICTs. For example, new micro-volunteering platforms have been criticized for misunderstanding volunteering in terms of a transaction of labor time [55]. Philanthropic technologies also often embody an understanding of philanthropy as charity—as focused on providing aid through a supra-economic and supra-political process of small-scale resource redistribution. Crowdfunding platforms, while heralded as a democratizing, have embodied philanthropy as a peer-to-peer financial transaction and created additional work for individual fundraisers [50]. Designing in support of charity has been more generally critiqued as problematic because it reinforces the status quo without troubling the systemic issues that lie behind the need for “aid” in the first place [23]. Designing

for philanthropy as formalized charity also fails to heed philanthropic studies' calls to cultivate a more holistic view that includes a breadth of everyday acts alongside formal instances of volunteering, advocacy, and donation [42].

While prior research helps us understand the current state of ICT use within philanthropic contexts—primarily by identifying instances in which existing ICTs fall short—they also point towards the importance of altering our unit of analysis [56] and studying the work of philanthropy more broadly in order to build a foundation for alternative ICT designs.

Studying the Work of Everyday Philanthropy

In this research, we respond to open questions in philanthropic studies and CSCW by drawing on the rich tradition of work practice studies to examine philanthropic work directly. As computing has moved beyond the workplace, much of the problem-framing in CSCW has shifted from workplace studies—sociological examinations of work practices, irrespective of the technology involved, that enabled agenda setting and theory building—to platform studies—technology-centric threads of analysis focusing on the users and uses of particular social computing technologies. What has been lost in this shift is a critical form of inquiry about the nature of work and practice that is far-enough removed from a system or platform that it can remain agnostic about a given artifact and open to locating places for new technologies—or recognizing when the implication is not to design (see [6]). As Suchman has argued, rather than focusing on “decontextualized, focal objects, floating in white space,” technologies should be examined “in relation to particular, densely populated environments of working practices and heterogeneous artifacts” [49].

Although there is much evidence of existing ICTs being ill-suited to philanthropic practices, there is little research directly investigating philanthropy's densely populated ecologies of practice (see [56]). Early “workplace studies” were crucial for the development of CSCW, not because they always produced neat design implications, but because they directed attention to ways that new computing tools might better support human practice from a holistic perspective—might support a worker in the complexities of a job, not just a user in the specificities of a sub-task; might support a situated social relationship that transcends multiple settings and interactions, not just the circumscribed piece of an interaction mediated through a specific computational system (e.g., [8, 32, 49]; see [40]).

One of the important legacies of work studies has been CSCW's awareness of the informal practices and invisible work that are crucial to the interdependent functioning of social life and technological systems (e.g., [32, 47, 49]). Our approach, rooted in this tradition, helps us to heed calls from philanthropic studies to examine forms of philanthropy that are integrated in everyday life, and are less visible than those forms of philanthropy that involve formal participation in nonprofit organizations.

Reframing Philanthropic Work as Care Work

Our analysis of participants' diary entries and reflective interviews found that a lens of *care work* provides a new basis for philanthropic design that is better aligned with the practices of philanthropists than the models of philanthropy embodied in current system design. A concept primarily developed within feminist and gender studies, care work refers to work enacted in service of others, with common examples being child care, care provided for elderly parents, nursing, and teaching [25]. Care work may be conducted either for pay or not for pay; however, its historical association with gendered divisions of labor, and the unpaid labor of family care, in particular, has contributed to it being rendered invisible in both research and broader society [25].

Care work has been of particular interest to a nascent but growing group of CSCW researchers (e.g., [7, 18, 34, 52]). These scholars highlight care work and care ethics as under-acknowledged aspects of social relations that are crucially relevant to understanding the broader ecosystems in which technologies function—including the role of the researcher/designer in these situations. A reframing of philanthropic work as care work helps to open up the design space for philanthropic technologies in ways that move away from streamlining resource redistribution and towards supporting more diverse social practices. Understanding philanthropy as a form of care work suggests new avenues for the design of tools to support philanthropic work while also drawing attention to the importance (and challenges) of designing for this often-invisible form of work.

METHODS

In this paper we present the results of a mobile diary and interview study with 35 participants designed to explore the breadth of philanthropy in which participants engaged.

Participants

Our goal in this research was to capture both traditionally acknowledged (so-called ‘formal’) forms of philanthropy as well as the more informal forms of philanthropy that are generally rendered analytically invisible. As such, we recruited participants who could reflect on both types of philanthropic engagements. Research suggests that informal philanthropy is a more ubiquitous precursor to formal philanthropy [42], and so we recruited participants through contacts at seven nonprofit organizations, spanning a diversity of social service domains and demographics served. These partner organizations distributed recruiting materials to their constituents including volunteers, donors, newsletter subscribers, and social media followers. From this pool, 35 adults completed the study, which included keeping a diary for 33 days and participating in a follow-up interview. Participants were compensated with US\$ 25 for taking part in the mobile diary study and with an additional US\$ 25 for participation in the reflective follow-up interviews.

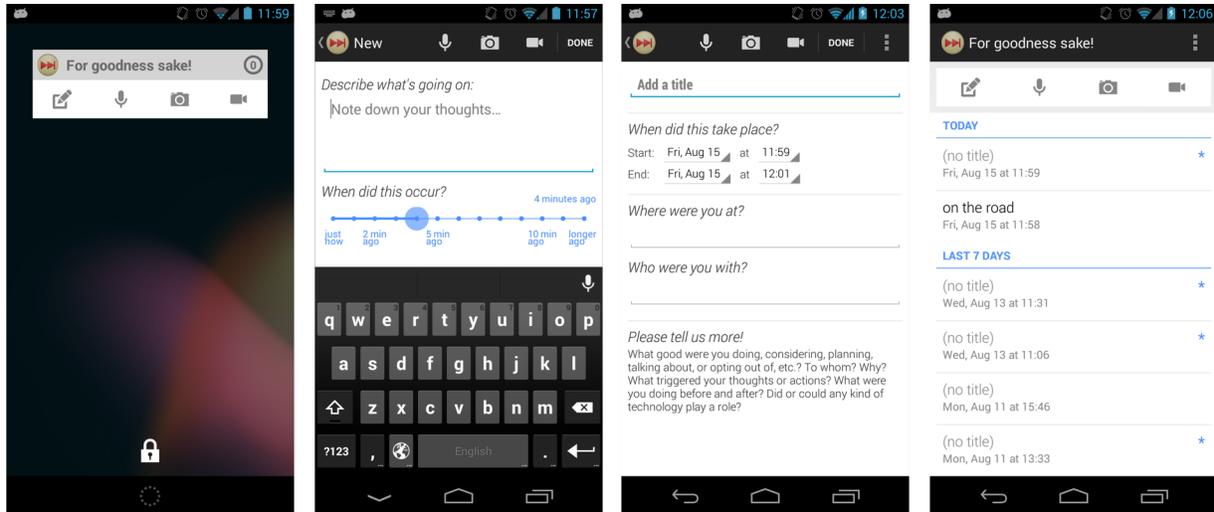


Figure 1: Screenshots of *For Goodness' Sake!*, our mobile diary application

Study Design

We approached the research from a grounded theory perspective, seeking to inductively build a new, broader foundation for future philanthropic technology design. Our approach has been most strongly influenced by more recent formulations of grounded theory that respond to postmodern theorizing (primarily [19]; see also [16, 17]). That said, our methods were also influenced by prior engagements over the course of our careers with a wider variety of naturalistic and qualitative approaches to research (e.g., [37, 38, 46]). In particular, we depart from the interview-centric design typical of much grounded theory research in adding a pre-interview diary-keeping phase of research. Described in more detail below, this combined diary-and-interview study design follows the methodological suggestions of Lofland *et al.* and Zimmerman and Wieder [38, 59]. This combination of methods is well suited to studying everyday philanthropy—an object of study comprising activities that suffused participants' daily life at unpredictable moments and were neither readily observable by us, nor foregrounded for participants so as to be conducive to cold interviewing.

Phase 1: Mobile Diary Study

In the first phase of the study, we asked participants to keep a diary of their everyday philanthropy for 33 days through a custom Android app *For Goodness' Sake!* which participants installed on their own devices (see Figure 1). We chose a 33-day period because we knew that it was typical for many of our partner organizations' constituents to participate on a monthly basis; we built in a few days beyond a month to support initial troubleshooting, as needed. Our inclusive guidance to participants—to “record any thoughts or activities that are in any way related to ‘doing good’ regardless of how trivial or mundane they might seem”—was based on recommendations made by researchers in philanthropic studies [42].

As a participant-driven, self-reporting technique, diary studies enable researchers to understand participant behavior and intent from situations that are difficult to anticipate or sense; and they enable research to gain participants' perspectives of the events important to them [13, 15, 26, 39, 45]. The mobile platform for the diary enabled us to capture everyday practices in situ. Following prior recommendations in the literature [12, 15, 27], our mobile diary app was designed so that participants could report diary entries in two phases: (1) a very brief, multi-modal note or snippet to be recorded in the moment (text, audio, photo, or video), and (2) an option to expand and elaborate this small snippet later on when more convenient for participants. Snippets enabled us to set a low threshold for reporting new diary entries and to better facilitate reporting diary entries as close to the event as possible. Elaborations enabled us to gather more detail on each entry, including the time, place, and social context (e.g., as part of a church activity, in collaboration with friends, in service of relatives).

As a precursor to interviews, we aimed for the diary study to surface participants' everyday routines and sometimes invisible practices to make them available both for their own reflection, and to construct a shared artifact providing common ground between participants and researchers in interviews [59]. To legitimize a broader set of philanthropic activities than are typically acknowledged and to encourage continued participation over the duration of the study (a concern with a diary study of this length, see [39]), we programmed the app to present participants with an inspirational quote about philanthropy every morning and to provide a reminder if no diary entries were recorded the previous day. We curated the inspirational quotes to represent the breadth of philanthropic engagement encouraged by the philanthropic studies literature [42]—i.e., to suggest both formal and informal types of volunteering,

advocacy, and giving—and strategically varied them over the 33-day study period.

Phase 2: Reflective Follow-up Interviews

We invited each participant for a semi-structured follow-up interview at the end of the diary-keeping period. Interviews lasted 1 hour 21 minutes on average (min: 0:50, max: 1:51) and were audio recorded and transcribed. Interviews followed an evolving protocol with three general phases:

Diary walkthroughs: First, we talked through printouts of all of a participant's diary entries to create a shared context for the rest of the interview. A researcher invited participants to add to or correct what was on the printout and asked participants to elaborate on the nature and history of their philanthropic work, e.g., "How did you start out using the [community information board]?" At the end of the walkthrough, we asked participants to cluster diary entries into groups they felt had something in common.

Contextual probes: We used visualizations of sensor data linked to diary entries (timestamps and GPS locations) to inquire into the contextual factors motivating or defining participants' philanthropic work. In addition, we asked participants to draw their own maps of the people involved in their philanthropy, including collaborators, beneficiaries, and motivators. Elaborative prompts were broad to explore participants' responses to the visualized data, such as "So is there anything on any of these [visualizations] that resonates with you or that surprises you or jumps out for you?"

Reflections on philanthropy: We concluded interviews with an exploration of cross-cutting themes in an open conversation that engaged participants in reflecting broadly on philanthropy and the experience of keeping a diary. Questions were specific to the history of each interview, such as "So earlier you said, 'being nice counts.' What doesn't count as doing good? Where is the boundary for you?"

Analysis

Analysis began immediately after the diary-keeping portion of the study, with a researcher reading the diary entries in preparation for conducting interviews. Early interviews focused on examining the context of philanthropic work, especially looking at how factors such as time, location, and sociality mattered for the different kinds of activities recorded in participants' diaries. As we interleaved interviews and analytic memoing [19], our theoretical questions shifted towards an examination of the more holistic situatedness of philanthropic work. After finishing the interviews, we interleaved additional analytic memoing with open coding of the interview transcripts. In tandem with this analysis, we printed diary entries and clustered them across participants as a way of exploring similarities and differences across the range of philanthropic work reported. Researchers met weekly to share insights across the research team.

As we engaged in a process of theoretical sampling to further develop our understanding of everyday philanthropic work, our memos and analysis moved from building a broad

understanding of the multiple factors influencing and defining different forms of philanthropic work towards a reframing of philanthropic work more broadly in a way that might honor its holistic situatedness: a situatedness which suggested a move away from formal/informal dichotomies towards understanding philanthropy along a continuum of care work; and an institutional situatedness that acknowledges the critical roles—rarely supported through design—of organizations in supporting the continuum of philanthropic work. In the rest of this paper, we unpack these two aspects of the holistic situatedness of philanthropic work.

PHILANTHROPIC WORK

I would say in general this is a good snapshot of what doing good looks like for me. Small acts for other people, a lot of doing good for my extended family and then contributing financially to my church. Those are my biggest doing goods. [P25]

The kinds of activities recorded in participants' diaries included numerous forms of so-called 'formal' philanthropy—instances of making a donation, volunteering, or conducting activism and outreach for a nonprofit organization—as well as many informal, everyday acts of "doing good," especially for friends, family, and coworkers.

By examining the variety of formal and informal activities together, we find that the philanthropic work of our participants might be better understood as forms of care work. Situated along a continuum of care, these activities had to go out of their day-to-day routine to carry out the work.

Across this continuum of care work, we identify three roles of organizations and institutions in supporting and transforming philanthropy. Although we took individual philanthropic activities as our unit of analysis, we find that institutions and organizations play important roles, if often invisibly: extending the reach of care work beyond personal social networks; enabling the continuity of care work; and supporting important forms of behind-the-scenes articulation work that make philanthropy possible.

A Continuum of Care Work

Reflecting on a diary entry titled "kindness level one," one participant explained how, during the course of the study, she came to think of her philanthropic activities as falling into two high-level groups.

This was where I figured out that I think kindness does have two levels. The first is just that friendly, nice manners level, so that's level one. ... They're all teeny tiny and barely even noticeable sometimes, but they add up. There's a cumulative effect to them. [P14]

In contrast to "kindness level one," P14 identified a second level of philanthropic work, "kindness level two," which she described as:

Big acts of kindness, giving money to the Tour de Cure or going to weed mom's flower garden because she had knee surgery and can't do it right now. That's a bigger thing that is more obvious, but there's not always one of those waiting around to be done. [P14]

P14's categories of kindness illustrate the two ends of what we came to see as a continuum along which participants' philanthropic work might be located. Notably, the two endpoints are neither differentiated by the informal/formal nature of the activity nor by the class or kind of work—volunteering, donation, or advocacy. Big acts of kindness included participating in formal organizations like the Tour de Cure as well as “going to weed mom's flower garden.” Instead, what differentiates these categories was the degree to which the work was routine and ordinary or required some more significant deviation from routine life. Moreover, what connected these categories was their orientation to, in P14's language, being ‘kind’ to others, or in our language, by their orientation to *caring* for others. In this section we explore the breadth of participants' philanthropic work, moving from more common everyday acts of care work to the less ordinary, ‘bigger’ acts of caring.

As participants explained in their interviews, many acts of everyday kindness were part of their daily routines, including things such as holding a door, giving someone a compliment, remembering a birthday, or sending a get well card. For a part-time student, sharing notes, answering questions, and studying with other part-time students was “just the norm of how we help each other” [P9]. For most participants, this degree of everyday care work was performed for family, friends, coworkers, or others who were encountered in the day-to-day rhythms and routines of people going about their lives. Although participants commonly indicated that these instances of everyday philanthropy were underreported in their diaries, the subset that were recorded enabled reflections about the work's importance beyond just meeting societal norms. For example, one participant described the “everyday very small things that we do all the time” [P8] as ways of heading off problems before they happened:

For me, it's doing the small tasks that help solve a need or meet a need or solve a problem, or a problem that might be happening. You can look—the lady with her arms full. That might be a problem, but if I can get there first and get the door open, no problem. [P8]

As this concern with short-circuiting problems suggests, acts of everyday care work extended outward from the socially expected towards acts of caring for people who needed, as one librarian put it, “a little bit of help” [P14]:

There are other people who need a little bit of help or have questions, or a mom with young children doesn't want to use the self-check because her hands are already full so we take care of them. [P14]

For a participant with a home bakery business, these kinds of care work included things recorded in her diary as “just

making some goody deliveries that day to my doctor's office and to my printing guy” [P7]. Although partially integrated into her bakery business routine, she explained in her interview that the goody deliveries went somewhat out of her way in that they responded to specific requests—for “angel food cake and berries and homemade whipped cream and all that” for the printing guy—or were carefully crafted for the individual's enjoyment—“[my doctor] likes lemon drop brownies that I do...he doesn't eat too many sweets too many times but he loves it when I bring stuff” [P7].

In moving towards philanthropic work that deviated farther from the routine, we find that in addition to the act itself, the broader situatedness of the act also matters. Apparently simple acts—like remembering and celebrating a family member's birthday—could stand out as more significant given extenuating circumstances. For example, P26's elaboration of a back story about a diary entry for a nephew's birthday located the activity as more out of the ordinary than a usual birthday dinner:

This [entry] is my nephew's birthday party. ... He's a heroin addict and he's been struggling, so it's really hard for my family to be supportive of him right now. So, we wanted to do something for him... we didn't want him to feel like that we forgot it. [P26]

“Bigger acts of kindness” thus required some greater deviation from a regular routine, or the explicit establishment of a new routine. These acts required more effort, more time, more energy, or more money. This kind of care work also had higher stakes for direct beneficiaries, often picking up the slack in social systems that might otherwise be understood as failing—especially, in our data, as related to healthcare and its intersection with working life. A commonly reported activity across many participants' diaries was that of taking someone else to the doctor. P10, for example, described proactively stepping in to aid a friend whose husband had fallen in their driveway, but didn't want to let his wife get him medical attention.

I grabbed my husband and my grandson and I called 911 because I knew I couldn't get him up. And then we stayed there... I was with him all day. [P10]

In such cases, care work deviated from the everyday because of the extraordinary extent of the time commitment involved; P10 spent all day with her friend's husband, not just a few minutes here or there. This kind of philanthropy extended from care work done for close friends and family to caring more broadly for one's community members. As P24 elaborated in reference to a diary entry titled, “covered shift for coworker,” sometimes this meant taking on someone's work when no one else would:

My coworker... ended up being hospitalized and she couldn't find anyone to cover her [shift].... I despise night shifts with a passion, and so, apparently, do all my other coworkers. And so, yes, I picked it up. [P24]

In another example, P14 described the “big things at work” that she sometimes did—new routines established in order to take special care of some patrons. As a librarian, P14 had begun maintaining a “secret list of compassion”:

I have several library patrons who either have physical or health issues which are obstructive to their own management of their day-to-day.... When they're bad, it's hard for them to take care of the little details.... I actually just keep a list of those patrons and I go through their cards once a week for them and try and make sure that they're up-to-date and not having overdue books. [P14]

These stories from our participants all draw into view the kinds of care work that are important for human flourishing. Although many of these examples of care work are different from the genres of philanthropy that we typically study—making donations, advocating, or volunteering for a particular cause—an orientation to care suffused the motivations and experiences of individuals in this study, even when they were participating in more traditionally-defined philanthropic activities. P4, for example, ran weekly with the residents of a local homeless shelter, in concert with the nonprofit organization, Back on my Feet. P4’s motivation for this volunteering was not just about volunteering for a philanthropic organization, but about creating community and doing care work:

That first day when I ran... they celebrated resident members that had just gotten jobs and there's a 17-year-old that lives in [the shelter] who's about to graduate from high school and they're making a huge deal of that. A lot of the non-residents are going to his graduation. [P4]

Although running may have been an everyday activity for P4, Back on my Feet provided an important context for helping this participant deviate from his everyday, extending the possibility of his connecting with and caring for people whom he would not otherwise have met.

The Practical and Political Roles of Institutions and Organizations in Supporting Care Work

Although philanthropic work associated with organizations was not the primary unit of analysis for the study, the role of institutions and organizations was ubiquitous—albeit often behind the scenes—in individuals’ philanthropic activities. As social infrastructure, these institutions extended the practical and political possibilities for care work; they shaped and facilitated the activities that participants recorded in their diaries along three key dimensions. First, institutions and organizations matter in shaping the social context of philanthropic work, thereby shaping the possibilities of who might be served by philanthropy. Second, institutions and organizations provide stability and continuity that can endure the patchy participation of any one individual over a lifetime and enable longer arcs of the development of philanthropic identities. Third, institutions and organizations scaffold the

completion of the often-boring, behind the scenes work that is necessary for more mission-visible care work to happen.

Extending the Reach of Care Work

It seems like most of the things that I said on this [diary] are either close family or coworkers are pretty much the only people that I've been interacting with. And I don't know. I feel like the general population—I wish that would be a little bit stronger... [P6]

Most of the acts of care work recorded in participants’ diaries were carried out for the benefit of friends and family members. Several participants, such as P6, lamented that their diaries did not reflect a greater involvement with other populations. We find that institutions and organizations—often referenced implicitly or only surfacing during the reflective interviews—served a critical role in extending individuals’ social networks and fostering broader communities. P27, for example, volunteered for a local farmer’s Community Supported Agriculture (CSA) program, not just to support a local farmer, but also to help build community with her neighbors:

The reason I participate in it is because there's about 45 neighbors that are in it and it's a great way to just meet neighbors, and then stay connected and share information. [P27]

Indeed, the relationships she formed through the CSA later mattered when she needed to make decisions about schools for her daughter, and eventually led to her involvement as a board member for a local neighborhood organization:

The CSA is where I first got involved with my neighborhood, and it's where I met a lot of people—met [neighborhood] board members; met parents that I could talk with about my daughter's school; or school education opportunities in and outside of the neighborhood That's where I first got to know the president of the board of the [neighborhood organization]; first started to get a little more involved after attending just some very initial organizational meetings. [P27]

In the case of P27, a semi-formal organization, here a CSA, transformed her participation in and knowledge of her local community. As previous examples have already shown—enacting care work at the library or covering the night shift for a coworker—formal institutional contexts, such as the workplace, also shaped the social context for philanthropic work, extending the reach of care work beyond the home and local neighborhood. When we look at the role of nonprofit organizations, in particular, we find that they often served to further reconfigure who could or would be served by an act of philanthropy—cutting across established and routine social strata and enabling care work to extend to these increasingly heterogeneous social contexts. For example, P7, a baker who often brought goodies to people within her personal social networks, also reported donating food to a

local food bank, which enabled her care work to extend to people she did not already know:

After the [big community event], we had some food left over... so I took this food over to [the food pantry]... for their afternoon programs because they have children that come there for mentoring and tutoring, as well as a free meal because a lot of these kids don't always know where their meals are coming from. [P7]

In such cases, the nonprofit organization expanded the network of potential beneficiaries by making it easier for participants to care for strangers. The role of organizations went beyond simply operating as a broker or centralized redistribution site; these organizations also undertook legitimacy work [50] to extend others' philanthropic social networks, often helping to make interactions with new people less intimidating or scary. Recall P4, who became involved in a program for running with the residents of a local shelter. The organization Back on my Feet provided a context for individuals like P4 to form new relationships with individuals who are often stigmatized. The organization coordinated a required orientation for runners like P4 that served to seed a community:

To be honest, when you pull up the first time, you're like, "Really? Am I going to do this? I don't know any of these people. What am I doing? It's 5:45 in the morning." But you know, you get out of the car and you go up and there were a couple of people there who were at the orientation and all of the folks from the [shelter], they're so happy that you came that they're coming up and introducing themselves...[P4]

The critical role of philanthropic organizations in extending the reach of care work functioned, in part, as a broadening influence—stretching the networks of individuals outward from more local and homogenous comfort zones. Institutions and organizations were also resources among networks, enabling individuals to pivot between and connect disparate social networks. For example, P22, a child advocate, was able to locate a bicycle for a client by leveraging the legitimacy of a social services organization to pivot between multiple personal, work, and other affiliational social networks when requesting a donation. In another case, P22 drew on her contacts in an alumni association to recruit donations and purchases at a former intern's garage sale, the proceeds of which benefited a mission project.

In contrast to these cases of institutionally-reconfigured philanthropy, when acting alone, participants gravitated towards safe and familiar interactions. For example, P14, the librarian, helps out patrons who are sick and disabled—who have a socially legitimate reason for not following the rules or normal course of action. Conspicuously absent from her account was any reference to individuals who were currently homeless who also occupied the library space. Indeed, on one occasion, she lamented not being able to find anyone

who needed help—and therefore being unable to record a diary entry on one day.

Thus, while institutional and organizational ties make possible expansions and pivots beyond networks of family and immediate friends, without intervening or intermediary institutions, we find the question—who is cared for?—is raised again and again.

Enabling the Endurance and Continuity of Care Work

Taking a broader view of philanthropy helps us see the ways that institutions matter not just for questions of who is served, but also for questions of who can participate in philanthropy. Institutions provide continuity and stability that is important for ensuring endurance of the mission over time and for creating a systemic continuity of opportunities that enable the development of individual philanthropic identities over time.

The continuity and stability afforded by institutions matter in the way that an organization and its mission can endure all of the many instances when an individual volunteer says no to a request for their service, or an individual donor does not respond to a call for funding. Interestingly, several participants in the study recorded numerous occasions of reading but *not* responding to requests from philanthropic organizations of which they were part. In these entries they captured moments in which they thought about or considered engaging in philanthropy, but did not actually follow through. P24 described one such diary entry:

[The email] was asking for a [volunteer] commitment for this year and my schedule is still kind of crazy, so I can't commit to a weekly schedule. So I was just thumbing through and seeing if there were any available that I could actually volunteer with, but I couldn't. [P24]

In another example, P9, a law student, recorded several entries about an organization that ran a free law clinic in an area underserved by the market-based law community. Although P9 typically volunteered at the clinic once a month, she did not record any volunteering at the clinic during the course of the diary study, due to an excessive workload at school. Yet, the clinic ran every weekend and members of the community it served could count on it being available to them every weekend, even when any one volunteer failed to show up. We can only assume that even more such non-actions happened than were recorded; yet, organizations, as a whole, and specific projects like the law clinic, were clearly able to sustain through the repeated non-actions of members.

These intermittently active participants still often considered themselves active members and active philanthropists, more generally—in some cases because they were involved in an organization in multiple ways and in some cases because they had a long-standing relationship with the organization, even as their own active involvement waxed and waned over time. For example, during the 33 days of the study, while P9 did not volunteer for the clinic, she did participate in a 5k

walk and fundraiser put on by the organization and also attended the organizations' monthly board meeting.

In addition to enabling the endurance of the philanthropic mission on a week-to-week basis, allowing individuals to participate in the organization as it fits in with other immediate demands, organizations also endure on a longer timeline that allows for someone's participation to change in nature over time, enabling the continuity and development of one's philanthropic identity over various stages of life.

P12, for example, described how her current philanthropic activities were both a continuation of a longer life-trajectory of participating in philanthropic causes—"I guess I've always felt strongly about donating to charities that I believe in"—and part of a new life stage of retirement: "[Before I retired] I was able to have the money to make the donation. Now I have the time to be able to make the time" [P12]. This shift in how she enacts care work reflects the continuing development of her philanthropic identity moving into a new phase of her life. The continuity of the organization supported this shift in role and identity.

Similarly, P27 reflected on the longer evolution of her participation in a community organization, over multiple life stages and the development of her philanthropic identity. Initially, P27 had not been able to join a neighborhood association when she first became interested, but only later in life as other circumstances changed:

When I moved even closer to this downtown district, the executive director reached out to me to get involved, and at that point I said no. I had a young child. And so, after I felt that she was grown a little bit more and I was living around the corner from the specific area that was their target of focus, I decided I really wanted to get involved. [P27]

At the time of the study, P27 was a highly involved board member at the organization. In addition to the changes in her family situation, she had also become able to join the neighborhood association and develop her philanthropy because she had a working situation that allowed her to fit in board member volunteer work during the regular workday: "I have a flexible job that I can schedule in a 10:00 meeting [for the volunteer work] and certainly take—go off the clock from my work." This particular instance is recorded in her diary as an hour and a half meeting over breakfast, for which she had already spent "20 minutes of phone calls and trying to nail down a date for breakfast." For many people, that schedule would make participation prohibitive. Indeed, for P27, this level of participation had not been possible at other times in her life. The endurance of the organization over time allows for its mission and impacts to have continuity even as individuals' involvement ebbs and flows over the course of each their own lifetimes. In this way, organizational stability and continuity matters at larger time scales, in line with long-term biographical events and the development of individuals' philanthropic identities.

Infrastructuring Care Work by Supporting Articulation Work
Institutions and organizations also played important roles in orchestrating and infrastructuring a diversity of genres of care work behind the scenes.

In one seemingly mundane diary entry, P10 recorded the purchase of a broom. As she further elaborated, she had learned as a child to purchase a particular brand of brooms made by individuals with visual impairments. However, the previous vendor for these brooms was no longer available to her. On the day recorded in her diary, P10 had sought out a new vendor for the brooms. Notably, the name of the organization is not mentioned in P10's diary entry, but the behind-the-scenes work its employees and volunteers do is what made P10's care work possible. The organization involved not only provided income to individuals who might otherwise be excluded by the markets; they provided the coordination and infrastructure to make it possible for P10 to enact care by purchasing a mundane household object.

Participants reported numerous instances of care work that were only possible because of the coordination and support of often-nameless nonprofit organizations, such as: donating books to be sold to support a local summer reading program [P14], giving blood [P12, P15, P31, P32, P33], and donating clothes to be sold to raise money for a variety of social service programs [P2, P3, P12, P18, P21, P23]. Participants also attended fundraising dinners for a refugee organization [P35], participated in a Relay for Life event [P32], supported friends riding bikes in a Tour de Cure diabetes research fundraiser [P14], went to a pet festival at a local park benefiting animal rescue organizations [P5, P26], and attended a coworker's fundraiser [P5]. Organizations' coordination and infrastructuring enabled these and other individuals to enact care work in many different ways, as appropriately situated in their lives. Not always obviously 'work,' these actions nevertheless were expressions of care:

[Today I went to] one of the [city's] Pride tonight events [to] show support for the gay community. I have a gay sister, nephew, and niece. I want them and our other gay friends [to] know that I love them and enjoy spending time with them. [P26]

In all cases, making such events happen required significant planning and coordination work. Participants logged attendance at planning meetings [P2, P4, P5, P7, P9, P19, P20, P27, P28, P34, P35], assessed purchasing decisions for volunteer coordination software [P4], staffed booths at festivals and fundraisers [P8, P27], and made lesson plans to train other volunteers [P12].

One participant, P12, was a new volunteer with the humane society at the time of this research. Although she became involved with the organization because of personal interest in and concern for animals, her volunteer work during the course of the study entirely revolved around doing laundry. Her record of this first "volunteer-in-training" session elaborates:

Got an email this morning that they needed help today. Since I've been meaning to get there I signed up... [I was] directed to the laundry room (standard for trainees) ... [Another volunteer] came at 4 and I did my best to give him the rundown. We agreed that we had no idea how much laundry happened there! [P12]

At the humane society, laundry is one often invisible part of the machinery that makes the organization's broader mission possible. Although it was not the most exciting work, P12 did link this chore back to a broader mission and community through involvement in the organization over time. As she recounted in her interview:

For a few hours I was the only one in the laundry room doing laundry, but you're still with people. You're part of a bigger picture. [P12]

Some organizations, like the Humane Society, managed such work as a rite of passage for new volunteers. In other organizations, such work was undertaken by more long-standing, deeply-involved volunteers. Regardless, the institution or organization lent meaning to mundane work, and scaffolded the completion of tasks that were necessary to support the organization's mission or broader cause, but were not forms of direct action themselves.

MAPPING A DESIGN SPACE FOR SUPPORTING PHILANTHROPY AS CARE WORK

In examining the practices of philanthropic work, our research opens up an opportunity to consider a newly legitimized domain for collaborative and ubiquitous computing and reframes the design space for philanthropic ICTs in terms of a logic of care. Embodied dysfunctionally in contemporary ICTs, philanthropy would appear to be isolated from other aspects of social life and center on transactions of money, goods, and services from those who have more time, money, or resources to those who have less. In contrast, a frame of care work better captures the breadth and intentions of the activities in which our participants engaged and provides a richer, more situated design space for supporting philanthropic work on its own terms.

Participants in this research described philanthropy in terms of the care work that was interleaved with myriad practices of social life. Thus, echoing the recent arguments of Jack and Jackson [34], we find that philanthropic work is not a distinct isolated activity such as making a donation or engaging in a specific volunteer activity, but rather is suffused throughout the everyday. Supporting this kind of diffuse philanthropic work will require not just designing in support of any one specific activity, but rather designing to support philanthropic work that overlays other forms of work and crosses institutional, task, and technological boundaries.

Recall P15, the librarian who maintained a list of patrons for whom she regularly renewed books so that they wouldn't be assessed fines. For P15, care work was interspersed with her job as a librarian, and interestingly took the form of working around a system that was designed to enforce black and white

rules which are ostensibly how libraries should function 'fairly,' but are not, in practice, how they function with care. Supporting philanthropic work may then require a willingness to design technologies for flexibility not fairness—that allow people to bend the rules or to enact different logics for shared values (see [4, 23, 31, 53]). As our participants explained over and over, their everyday philanthropy was about caring for people who needed a little "extra help"—for counterbalancing the inequalities that characterize social life, and cannot be designed away by systems that enforce 'equal treatment.'

In this way, we can understand philanthropic work as work that is less defined by the content of its task, and more by the care ethic one brings to it. As understood in feminist studies, care work is characterized by an ethically-grounded orientation to human action centering on the relationships between the self and others:

the vision that self and other will be treated as of equal worth, that despite differences in power, things will be fair; the vision that everyone will be responded to and included, that no one will be left alone or hurt ([28]; see also [2, 52]).

Yet, within computing disciplines, care work has often been seen as "a problem to be solved" [3]. Systems are designed to automate or otherwise obviate the need for the 'chores' of care work *qua* women's work: cooking, feeding, cleaning, shopping. These activities are not often recognized or supported as legitimate or valuable forms of work in their own right ([3]; see also [35]). A move to design in support of philanthropic work as care work will require a shift in this perspective and a tandem move away from the logics of transactions, productivity, control, and efficiency that have historically dominated ICT design (see [43]). If we fail to take these two moves in tandem, we run the risk of reinscribing philanthropic work in existing logics of efficiency and productivity and thereby developing systems that feel inauthentic and undermining of genuine care (see [33]).

Although often undervalued, care work creates social cohesion, builds and sustains community, and more generally improves the lives of others [25]. Designing in *support of* philanthropic work as care work, especially in the unremarkability of the everyday, stands to be a powerful role for collaborative and ubiquitous computing systems. In what follows, we unpack two axes of a design space for philanthropic work, foregrounded by a lens of care work: designing for a continuum of everydayness and designing for a broader diversity of 'philanthropy for whom.'

Designing for a Continuum of Everydayness

In this paper, we have characterized participants' philanthropic work along a continuum differentiated by its everydayness—from "little acts of kindness" that are routine and nearly invisible, to the rarer act of philanthropy that breaks with everyday routines, a "bigger thing that is more

obvious” [P14]. In recent years, many computing tools have emerged to support philanthropy of an ‘everyday form.’ However, these tools have almost exclusively operationalized the ‘everyday’ as ‘micro.’ Google’s OneToday application and companies like HandUp support microdonations, reaffirming the value of giving in small increments. Platforms like Sparked help to match potential volunteers with microvolunteering opportunities (see also [9, 11]). In attempting to make philanthropy more accessible by breaking it down into smaller and smaller chunks, these tools reinforce narratives about the overwhelming business of everyday life (see [31, 36]), and presume that the primary problems facing philanthropy are centered on a need for sourcing free resources or labor while facilitating more efficient and direct transactions between donors and recipients. However, the philanthropists in our research reflected a broader diversity of needs and desires, and their stories suggest an alternative space for design across a continuum of everydayness.

Many participants seemed most interested in integrating more out-of-the-ordinary acts of philanthropy into their lives. As P14 observed, “there’s not always one of those waiting around to be done.” Philanthropy requiring greater deviations from the normal and routine—an opportunity to step out of the everyday and connect with another person in a way that felt like it was having a bigger impact—were often experienced as being more meaningful.

In considering the situatedness of philanthropy in everyday life, this research also reminds us that that the scale of a human life might be understood not only as a series of potential philanthropic moments—during which individuals may or may not be able to engage in care work—but also as a philanthropic biography developed over a lifetime. Thus, designing to support a diversity of individuals’ engagements in philanthropy means attending to and designing across biographical time scales. As we found in this research, people often engage in philanthropic work differently at different points in their lifetime—as a volunteer in retirement after having been a donor as a working professional; as a volunteer while employed at a flexible job, as a peripheral participant when balancing child-rearing or a demanding career. In these cases, trajectories of participation were not just unidirectional, moving from more residual philanthropy to more out-of-the-ordinary philanthropy. Instead, we found forms of engagement that transformed in multiple directions, in alignment with longer-term biographical changes.

Designing across the entire continuum of everydayness, then, means designing for more than residual or micro opportunities. It also means exploring ways to support philanthropic work that deviates from the everyday. Rather than focusing efforts on making philanthropy ‘more accessible,’ we might design to celebrate possibilities for augmenting individuals’ abilities to express care and concern with greater magnitude, as greater deviations from routines and ingrained habits.

But further, we must also design in ways that help individuals move across the continuum. This research suggests the need for designing technology that supports a diversity of modes of participation across a continuum of everydayness and legitimizes the continuity of the ebbs and flows that characterize social life. It also means creating residual opportunities that sow the seeds for larger biographical trajectories of philanthropic participation rather than facilitating the disconnected, one-off, and anonymous microvolunteering or microdonation. Designing to facilitate philanthropy’s ‘fit’ into social life doesn’t necessarily mean scaling down; instead, it sometimes means scaling up.

Designing for a Broader Diversity of ‘Philanthropy for Whom’

Studies of invisible work have always foregrounded political questions of whose work is and is not considered legitimate [47]. Our research reinvokes questions about whose work counts and also highlights a new, related, question of concern: for whom is care work performed? For whom is care work performed if the institutions and organizations that are fundamental to the experience of expanding one’s networks and comfort zones are being replaced by transactional platforms? For whom is care work performed if algorithms are trained to display posts that are similar to ones you’ve liked previously, that are within your comfort zone? For whom is care work performed if voting mechanisms in online forums encourage homogeneity in the community?

One of the questions raised by philanthropic studies research asks whether and how philanthropic actions at the local scale—care work for friends and family—relates to individuals’ actions at the societal scale that extend to unknown others. Schervish and Havens have suggested that local acts of care are a stepping stone to caring over a “wider horizon”:

...the informal and generally unrecognized assistance carried out in and around the community of one’s family, friends, and associates, is where we first identify with the fate of others and learn to care for them, and the beginning of and the opening to a wider horizon of assistance. [42].

Our research shows that understanding and supporting the role of institutions and organizations in extending the reach of care work—in shaping these interdependent social contexts and thereby shaping answers to questions of who might be served by philanthropy—stands to be a particularly valuable role for the CSCW community to play. In particular, our research suggests a need to ask how we might help users encounter heterogeneity—to broaden the diversity of individuals and populations for whom one might care. New computing tools often aim to socialize philanthropy by leveraging social media platforms and existing social networks. Our research suggests that it is important to resist the temptation merely to leverage existing social networks in the tools that we build. Nonprofit organizations are

important, in part, because they shape social networks—extending, intervening, and altering rather than just leveraging what is already there. These functions of social institutions are precisely those that are threatened by the underlying assumptions embodied by many social and ubiquitous computing technologies. Thus, our research largely suggests the need to reaffirm—not replace—institutions and organizations in the design of computing systems both for philanthropy and beyond.

STUDYING WORK IN SITU AND AT SCALE

As computing has moved beyond the workplace, genres of scholarship in CSCW have evolved. In following computing as it continues to “reach out”—off the desktop, out of the workplace, and into everyday life [29], research scoped around analyses of work practices in organizations have given way to research scoped around particular classes of software systems or its users. Yet, the dovetailing of research design with technology use has been met with criticism in recent years, particularly from scholars who have drawn attention to the limitations of focusing on individual consumer-users rather than citizens in the context of large-scale problems [14, 21] or the importance of studying non-use not to understand how to convert non-users into users, but to better understand the broader contexts in which technology is experienced [5, 41, 57].

Studies of work “for its own sake” [40] gave us the theoretical foundations (e.g., articulation work [49]) upon which many contemporary scholars still build (e.g., [50]). Although the translation of holistically-scoped research into ‘design implications’ can be problematic [24, 40], retrospective reviews of the field often cite precisely this broad-based empirical and theoretical work as having the most impact over time [24].

As previous research has shown, and as this work underscores, if we aren’t backing out analytically to explore the ways that human practice transcends delineable contexts and tools, then we severely limit the kinds of insights we can derive. In studies bounded by the use of a particular technology, it is difficult to move beyond surfacing a set of limitations of that technology; from that scope, nothing can be known about relevant practices that unfold outside of the context of use (or struggles-to-use). Moreover, the implications of these studies are similarly constrained, as the design implications of technologically-bounded research almost exclusively produce recommendations to improve that particular system, without the perspective necessary for envisioning how or why design might need to intervene across a more diverse sociotechnical ecosystem. A return to studies of practice or work as the unit of analysis repositions the field toward the possibility of understanding the roles of or potentials for technology ‘in situ.’

In this research, both our insights about the way that organizations matter for philanthropy and about the benefits of re-framing philanthropic work in terms of care work would not have been easily discernable if our study had been

bounded around and focused on how particular systems are used—systems designed in advance to support a different model of philanthropic work. Beyond these findings for philanthropic informatics, this research also demonstrates the renewed importance of scaling up the unit of analysis in research, reaffirming that studies of work remain valuable and can offer unique insights, even as work and computing leave the traditional workplace, transcending traditionally taken-for-granted boundaries.

CONCLUSION

In this paper, we have drawn on data collected through a 33-day mobile diary study, complemented by follow-up interviews, to examine how philanthropic work might be conceptualized more broadly as including both formal and informal acts of ‘doing good.’ Our analysis of this data foregrounds a continuum of care work as a frame for understanding the practices of philanthropy that could be better supported through alternative approaches to designing for ‘the everyday.’ Our research also reveals the multi-faceted roles of organizations and institutions in supporting contemporary philanthropic work and concomitantly points to the importance of designing to affirm—rather than streamline or replace—institutions and organizations. In so doing, our research underscores the value for CSCW scholarship in engaging with larger units of analysis and attuning to forms of human practice that suffuse multiple social situations and are not limited to a specific task nor a specific technological use case.

In drawing attention to philanthropic work as a genre of care work, we respond to calls in philanthropic studies to find ways to understand philanthropy as it transcends an informal/formal divide [42], we respond to calls in CSCW to study philanthropy more holistically [56], and we contribute to the growing body of CSCW research and practice focusing on care work [2, 52]. A legacy of CSCW scholarship about invisible work has long raised questions of whose work is legitimate. Our research foregrounds the complementary question about who might benefit from the various forms of work that CSCW tools support. Designing for philanthropy is not just about designing for end-users who make donations or volunteer their time. Designing for philanthropy is also about making choices about what kinds of care work to support and these choices impact who might be able to benefit from that care.

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REFERENCES

1. Gregory D. Abowd and Elizabeth D. Mynatt. 2000. Charting past, present, and future research in

- ubiquitous computing. *ACM Transactions on Computer-Human Interaction (TOCHI)*. 7(1), 58.
2. Amelia Abreau. 2016. *Towards an Ethics of Care: Understanding and Acknowledging Care Work in Technology Companies*. Talk at *Open Source Bridge*. June 21-24, 2016, Portland Oregon. Text available at: <https://medium.com/@ameliabreu/towards-an-ethic-of-care-26769966fec>
 3. Amelia Abreau. 2016. Care, automation, and design. June 28, 2016. *Medium*. Available at: <https://medium.com/@ameliabreu/care-automation-and-advertising-9d9122d50437>
 4. Mariam Asad and Christopher A. Le Dantec. 2015. Illegitimate Civic Participation: Supporting Community Activists on the Ground. *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*. 1694-1703. <http://dx.doi.org/10.1145/2675133.2675156>
 5. Eric P. S. Baumer, Jenna Burrell, Morgan G. Ames, Jed R. Brubaker, and Paul Dourish. 2015. On the Importance and Implications of Studying Technology Non-use. *interactions*. 22, 2, 52-56. <http://dx.doi.org/10.1145/2723667>
 6. Eric P. S. Baumer and M. Six Silberman. 2011. When the Implication is Not to Design (Technology). *Proc. CHI 2011*. 2271-2274. <http://dx.doi.org/10.1145/1978942.1979275>
 7. Shaowen Bardzell, Shad Gross, Jeffrey Wain, Austin Toombs, and Jeffrey Bardzell. 2011. The significant screwdriver: care, domestic masculinity, and interaction design. In *Proceedings of the 25th BCS Conference on Human-Computer Interaction (BCS-HCI '11)*, 371-377.
 8. R. Bentley, J. A. Hughes, D. Randall, T. Rodden, P. Sawyer, D. Shapiro, and I. Sommerville. 1992. Ethnographically-informed Systems Design for Air Traffic Control. *Proceedings of the 1992 ACM Conference on Computer-supported Cooperative Work*. 123--129. <http://dx.doi.org/10.1145/143457.143470>
 9. Michael Bernstein, Mike Bright, Ed Cutrell, Steven Dow, Elizabeth Gerber, Anupam Jain, and Anand Kulkarni. 2013. Micro-volunteering: helping the helpers in development. In *Proceedings of the 2013 conference on Computer supported cooperative work companion (CSCW '13)*, 85-88. <http://dx.doi.org/10.1145/2441955.2441979>
 10. Susanne Bødker. 2006. When second wave HCI meets third wave challenges. In *Proceedings of the 4th Nordic conference on Human-computer interaction: changing roles (NordiCHI '06)*, Anders Mørch, Konrad Morgan, Tone Bratteteig, Gautam Ghosh, and Dag Svanaes (Eds.). ACM, New York, NY, USA, 1-8.
 11. Erin Brady, Meredith Ringel Morris, and Jeffrey P. Bigham. 2015. Gauging Receptiveness to Social Microvolunteering. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems (CHI '15)*, 1055-1064. <http://dx.doi.org/10.1145/2702123.2702329>
 12. Joel Brandt, Noah Weiss, and Scott R. Klemmer. 2007. txt 4 l8r: lowering the burden for diary studies under mobile conditions. In *CHI '07 Extended Abstracts on Human Factors in Computing Systems (CHI EA '07)*, 2303-2308. <http://doi.acm.org/10.1145/1240866.1240998>
 13. Barry A. T. Brown, Abigail J. Sellen, and Kenton P. O'Hara. 2000. A diary study of information capture in working life. In *Proceedings of the SIGCHI conference on Human Factors in Computing Systems (CHI '00)*, 438-445. <http://doi.acm.org/10.1145/332040.332472>
 14. Hronn Brynjarsdóttir, Maria Håkansson, James Pierce, Eric Baumer, Carl DiSalvo, and Phoebe Sengers. 2012. Sustainably unpersuaded: how persuasion narrows our vision of sustainability. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '12)*, 947-956. <http://dx.doi.org/10.1145/2207676.2208539>
 15. Scott Carter and Jennifer Mankoff. 2005. When participants do the capturing: the role of media in diary studies. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '05)*, 899-908. <http://doi.acm.org/10.1145/1054972.1055098>
 16. Adele Clarke. 2005. *Situational Analysis*. Sage Publications.
 17. Kathy Charmaz. 2006. *Constructing Grounded Theory*. Sage Publications.
 18. Marisa Leavitt Cohn. 2016. Convivial Decay: Entangled Lifetimes in a Geriatric Infrastructure. *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing*. 1511-1523. <http://dx.doi.org/10.1145/2818048.2820077>
 19. Juliet M Corbin and Anselm C Strauss. 2007. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3rd edition). Sage Publications, Inc.
 20. Jill P. Dimond, Michaelanne Dye, Daphne Larose, and Amy S. Bruckman. 2013. Hollaback!: the role of storytelling online in a social movement organization. In *Proceedings of the 2013 conference on Computer supported cooperative work (CSCW '13)*, 477-490. <http://dx.doi.org/10.1145/2441776.2441831>
 21. Carl DiSalvo, Phoebe Sengers, and Hrónn Brynjarsdóttir. 2010. Mapping the landscape of sustainable HCI. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*

- (CHI '10), 1975-1984.
<http://dx.doi.org/10.1145/1753326.1753625>
22. Lynn Dombrowski, Gillian R. Hayes, Melissa Mazmanian, and Amy Vaida. 2014. E-government Intermediaries and the Challenges of Access and Trust. *ACM Trans. Comput.-Hum. Interact.* 21, 2, 13:1-13:22. <http://dx.doi.org/10.1145/2559985>
 23. Lynn Dombrowski, Ellie Harmon, and Sarah Fox. 2016. Social Justice-Oriented Interaction Design: Outlining Key Design Strategies and Commitments. *Proc. DIS 2016*.
 24. Paul Dourish. 2006. Implications for design. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '06)*, Rebecca Grinter, Thomas Rodden, Paul Aoki, Ed Cutrell, Robin Jeffries, and Gary Olson (Eds.), 541-550. <http://dx.doi.org/10.1145/1124772.1124855>
 25. Paula England. 2005. Emerging Theories of Care Work. *Annual Review of Sociology.* 31, 381-399.
 26. Jon Froehlich, Mike Y. Chen, Sunny Consolvo, Beverly Harrison, and James A. Landay. 2007. MyExperience: a system for in situ tracing and capturing of user feedback on mobile phones. In *Proceedings of the 5th international conference on Mobile systems, applications and services (MobiSys '07)*, 57-70. <http://doi.acm.org/10.1145/1247660.1247670>
 27. Jens Gerken, Stefan Dierdorf, Patric Schmid, Alexandra Sautner, and Harald Reiterer. 2010. Pocket Bee: a multi-modal diary for field research. In *Proceedings of the 6th Nordic Conference on Human-Computer Interaction: Extending Boundaries (NordiCHI '10)*, 651-654. <http://doi.acm.org/10.1145/1868914.1868996>
 28. Carol Gilligan. 1982. *In a Different Voice: Psychological Theory and Women's Development*. Harvard University Press.
 29. Jonathan Grudin. 1990. The computer reaches out: the historical continuity of interface design. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '90)*, Jane Carrasco Chew and John Whiteside (Eds.), 261-268. <http://dx.doi.org/10.1145/97243.97284>
 30. Maria Håkansson and Phoebe Sengers. 2013. Beyond being green: simple living families and ICT. *Proc. CHI 2013*. 2725-2734.
 31. Ellie Harmon and Melissa Mazmanian. 2013. Stories of the Smartphone in Everyday Discourse: Conflict, Tension & Instability. *Proc. CHI 2013*. 1051-1060.
 32. Christian Heath and Paul Luff. 1991. Collaborative Activity and Technological Design: Task Coordination in London Underground Control Rooms. *Proceedings of the Second Conference on European Conference on Computer-Supported Cooperative Work*. 65-80.
 33. Arlie Hochschild. 2012. *The Outsourced Self*. Metropolitan Books.
 34. Margaret Jack and Steven J. Jackson. 2016. Logistics As Care and Control: An Investigation into the UNICEF Supply Division. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*. 2209-2219. <http://dx.doi.org/10.1145/2858036.2858503>
 35. Cheris Kramarae. 1988. Gotta Go Myrtle, Technology's at the Door. *Technology and Women's Voices: Keeping in Touch*. Cheris Kramarae (Ed.). Routledge and Kegan Paul, 1-14.
 36. Gilly Leshed and Phoebe Sengers. 2011. "I lie to myself that I have freedom in my own schedule": productivity tools and experiences of busyness. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '11)*, 905-914. <http://dx.doi.org/10.1145/1978942.1979077>
 37. Yvonna S Lincoln and Egon G Guba. 1985. *Naturalistic Inquiry*. Sage Publications.
 38. John Lofland, David Snow, Leon Anderson, and Lyn H. Lofland. 2006. *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis* (4th edition). Thomson-Wadsworth.
 39. Leysia Palen and Marilyn Salzman. 2002. Voice-mail diary studies for naturalistic data capture under mobile conditions. In *Proceedings of the 2002 ACM conference on Computer supported cooperative work (CSCW '02)*, 87-95. <http://doi.acm.org/10.1145/587078.587092>
 40. Lydia Plowman, Yvonne Rogers, and Magnus Ramage. 1995. What Are Workplace Studies For? *The Fourth European Conference on Computer-Supported Cooperative Work (ECSCW'95)*. 309-324.
 41. Christine Satchell and Paul Dourish. 2009. Beyond the user: use and non-use in HCI. In *Proceedings of the 21st Annual Conference of the Australian Computer-Human Interaction Special Interest Group: Design: Open 24/7 (OZCHI '09)*, 9-16. <http://dx.doi.org/10.1145/1738826.1738829>
 42. Paul G. Schervish and John J. Havens. 2002. The Boston Area Diary Study and the Moral Citizenship of Care. *Voluntas: International Journal of Voluntary and Nonprofit Organizations.* 13, 1, 47-71. <http://dx.doi.org/10.1023/A:1014758113132>
 43. Phoebe Sengers. 2011. What I learned on Change Islands: reflections on IT and pace of life. *interactions* 18, 2 (March 2011), 40-48. <http://dx.doi.org/10.1145/1925820.1925830>

44. Clay Shirky. 2008. *Here Comes Everybody: The Power of Organizing Without Organizations*. Penguin.
45. Timothy Sohn, Kevin A. Li, William G. Griswold, and James D. Hollan. 2008. A diary study of mobile information needs. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '08)*, 433-442. <http://doi.acm.org/10.1145/1357054.1357125>
46. James P. Spradley. 1979. *The Ethnographic Interview*. Harcourt, Brace, Janovich.
47. Susan Leigh Star and Anselm Strauss. 1999. Layers of Silence, Arenas of Voice: The Ecology of Visible and Invisible Work. *Computer Supported Cooperative Work (CSCW)*. 8, 9-30.
48. Kate Starbird and Jeannie Stamberger. 2010. Tweak the tweet: Leveraging microblogging proliferation with a prescriptive syntax to support citizen reporting. In *Proc. ISCRAM*.
49. Lucy Suchman. 1996. Supporting Articulation Work. *Computerization and Controversy: Value Conflicts and Social Choices*. Rob Kling (Ed.). Morgan Kaufmann, 407-423.
50. Katie G. Tanaka and Amy Volda. 2016. Legitimacy Work: Invisible Work in Philanthropic Crowdfunding. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*. 4550-4561. <http://dx.doi.org/10.1145/2858036.2858110>
51. Peter Tolmie, James Pycock, Tim Diggins, Allan Maclean, and Alain Karsenty. 2002. Unremarkable computing. *Proc. CHI 2002*. 399-406.
52. Austin L. Toombs, Shaowen Bardzell, and Jeffrey Bardzell. 2015. The Proper Care and Feeding of Hackerspaces: Care Ethics and Cultures of Making. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems (CHI '15)*, 629-638. <http://dx.doi.org/10.1145/2702123.2702522>
53. Amy Volda, Lynn Dombrowski, Gillian R. Hayes, and Melissa Mazmanian. 2014. Shared Values/Conflicting Logics: Working Around e-Government Systems. *Proceedings of the 32nd Annual ACM Conference on Human Factors in Computing Systems (CHI '14)*, 3583-3592. <http://dx.doi.org/10.1145/2556288.2556971>
54. Amy Volda, Ellie Harmon, and Ban Al-Ani. 2011. Homebrew databases: complexities of everyday information management in nonprofit organizations. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '11)*, 915-924.
55. Amy Volda, Ellie Harmon, and Ban Al-Ani. 2012. Bridging between organizations and the public: volunteer coordinators' uneasy relationship with social computing. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '12)*, 1967-1976. <http://dx.doi.org/10.1145/2207676.2208341>
56. Amy Volda, Zheng Yao, and Matthias Korn. 2015. (Infra)Structures of Volunteering. *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '15)*, 1704-1716.
57. Jill Palzkill Woelfer and David G. Hendry. 2011. Designing ubiquitous information systems for a community of homeless young people: precaution and a way forward. *Personal Ubiquitous Comput.* 15, 6, 565-573.
58. Sally Wyatt. 2003. Non-users also matter: The construction of users and non-users of the Internet. In Oudshoorn and Pinch (Ed.), *How Users Matter: The Co-construction of Users and Technology*. MIT Press.
59. Don H. Zimmerman and D. Lawrence Wieder. 1977. "The Diary-Interview Method." *Urban Life*. 5, 479-498.