Research and/as Relation: Documenting Experiences of Community-Collaborative Researchers in HCI

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Community-collaborative approaches (CCA) have been proposed as more equitable ways to engage communities in research, as they urge researchers to commit to long-term relationships with community members than with other participatory methods. However, the normative structures of HCI and computing research can present challenges in pursuing CCA for the researchers and community partners involved. This paper offers insights into: i) how research and relation impact each other, and ii) how we can conceptualize research as a mode of relation. We present our findings from eighteen semi-structured interviews with community-collaborative researchers in computing and HCI. We then ground our paper in theories of relation and relationality from Caribbean thought, Black studies, and Indigenous scholarship to apply a conceptual framework of relation to our findings. Through this work, we aim to interrogate what it means to center relationality in CCA, beyond and within the development of scientific research.

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

Additional Key Words and Phrases: community-collaborative research, relationality, action research

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1 Introduction

Equity and inclusion have become an important topic in HCI research, interrogating how technology design may reify systems of oppression [8, 18, 19]. Equity-based approaches to HCI often encourage researchers to design *with* rather than *for*, recognizing the importance of lived experience and situated knowledge in determining how technology might support marginalized populations and communities [7, 18, 19, 81]. In these contexts, researchers often turn to community-collaborative approaches (CCA) aiming to produce and surface knowledge with, for, and alongside community members. But what does it mean for researchers to be in relation to the community? What are some possibilities and challenges that emerge when we bring relational intimacies into computing research?

The normative structures and practices of HCI research can present particular challenges or sensitivities in CCA. Previous research has discussed the misalignment between community practices and HCI research methods [37, 38, 54] and how community participation can be exploited to legitimize broader systems of oppression [62, 76]. Research papers focusing on CCA often highlight how researchers using community-collaborative methods should engage with a certain level of sensitivity and care beyond the consideration of community participation and inclusion [47]. CSCW

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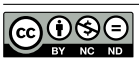

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and HCI publications have featured projects in which authors have developed relationships with community members before, during, throughout, and beyond research engagements [32, 38, 47]. However, even if researchers engage with the community in a non-research capacity beforehand, community members may be reluctant to participate in research due to histories of research injustice, fear of judgment or repercussions, and lack of continued involvement with results and dissemination [38, 69].

With an understanding of the many relational challenges of CCA in HCI and computing more broadly, we consider the need to articulate a specific politic of HCI, as suggested by Keyes, Hoy, and Drouhard [42]. Following this, we propose *research and/as relation,* a conceptualization of the relational politic required for equitable and just community collaboration in computing research. We use the phrasing *and/as* because it allows for nuance that captures the dialectical relationship between research and relation. For this work, we use the and/as duality in recognition of: i) how research *and* relation impact each other, and ii) research *as* a mode of relation.

In this paper, we explore and synthesize the relational experiences of community-collaborative researchers in HCI through an interview study with 18 community-collaborative researchers in computing and HCI. Through this work, we aim to interrogate what it means to center relationality in the practice of community-collaborative research, beyond and within the development of research relationships. Our project seeks to answer the following questions:

- How might we define the culture of CCA in HCI and computing research? What are the sentiments, motivations, and institutional cultures behind or around the work?
- How do community-collaborative researchers in HCI and computing engage with and understand the multiple relationships (with community, collaborators, with themselves, and with disciplinary cultures) present in research?

As scholars, we recognize that valuable knowledge about community-collaborative approaches often remains experiential and accessible primarily through mentorship and conversation rather than formal academic channels. Although ethnographic work has offered important individual perspectives on CCA and contributed to a shared understanding of community-collaborative research in HCI (e.g., [38, 47]), less work has synthesized across diverse experiences. Our work builds on the approach of recent interview studies examining HCI researchers' experiences (e.g., [21, 23, 49, 63, 79]) and contributes to disciplinary understandings of CCA by connecting our participants' experiences with CCA with theories of relation from Caribbean thought, Black studies, and Indigenous scholarship. We offer insights that encourage understanding communities as more than mere contributors to research. This synthesis of relational research practices across multiple perspectives allows us to interrogate what it means to center relationality in CCA, both beyond and within the development of scientific research.

2 Related Work

2.1 Social impact and HCI methodologies

In the pursuit of equitable and socially impactful technologies, HCI scholars have proposed a variety of methodological orientations for design practice and methods. Many of these approaches touch on broadening participation in design, consequently contributing to the discourse around CCA in CSCW and HCI.

Prior work in HCI has explored what it means to account for values in design, particularly through *value-sensitive design* (VSD) [30, 31], *feminist HCI* [6, 7], and *social justice-oriented interaction design* [22, 28]. VSD does not account for a *particular* set of values at the outset, as it is posed as a method that aims to broaden the scope of values that are considered in design within a variety of domains [31], while feminist HCI and social justice-oriented interaction design reflect a broader interest

in the role of design in social change and, as such, the values and commitments that should be reflected in design [7, 22]. Both frameworks call for the broadening of participation throughout the research process as a way to engender more equitable and accountable research engagements.

Broader participation in the research process has influenced further discussions on the role of power relations in the design of technological systems. Prior work on decolonial and postcolonial computing [2, 3, 12, 40], critical race theory [52], and Black feminist epistemologies [24] in HCI provide recommendations to better recognize and engage with positionality and historical differences in power relations in our design practices. Furthermore, methodological orientations such as *design justice* [18], *prefigurative design* [4, 5], *anarchist HCI* [42], and *assets-based design* [81, 82] expand on the idea that design processes can themselves be socially impactful, highlighting opportunities for methodological intervention that can contribute to the deconstruction of oppressive technology practices. Focusing on the impact of relation in their proposal for an anarchist HCI, Keyes, Hoy, and Drouhard [42] suggest that reckoning with imbalanced power dynamics in our enactment of our relationships with the world, with our research participants and communities, and with ourselves as researchers can enable us to prefigure less oppressive worlds. Through a lens of relation, our work hopes to illuminate pathways toward a prefigurative orientation to research and design, building on this lineage of methodological approaches in HCI by synthesizing community-collaborative researchers' experiences in their relations to the communities with whom they are involved.

2.2 Community-collaborative approaches in CSCW and HCI

Historically, CSCW and HCI scholars have used a variety of terms to describe research practices that engage, collaborate with, and hope to share power with community members [17, 44, 71]. In our participant pool, researchers used a variety of terms to describe their research methodologies, such as participatory design, participatory action research, community-based participatory research, and community-led research. To acknowledge the diverse experiences and self-definitions of our participants, we use *community-collaborative approaches (CCA),* an umbrella term coined by Cooper et al. [17]. *CCA* is used to describe a variety of methodological approaches in which community members participate throughout the process of researching and developing sociotechnical solutions or technologies to address matters of concern in the community.

In centering collaborative design and real life applicability, CCA build on workplace participatory design traditions in CSCW by expanding and reorienting the boundaries and contexts for technology design to acknowledge the increased prevalence of technology in everyday life [9, 11]. Carroll [11, p. 308] set out a vision for CCA in HCI that centered a conception of community as a group with "commitments to shared purposes and meanings," specifically naming the dynamics that arise in traditional proximate communities. More than two decades later, Cooper et al. [17, p. 12] systematically reviewed HCI literature between 2000–2021 that employed CCA and surfaced a conception of "community" in CCA that relied on the self-definition of a group, finding that "social relations between community members are key to the existence of a community, in addition to any common identifying characteristics of individuals." In our work, we did not adhere to these definitions of community, instead relying on researchers' self-identification of their work as using community-collaborative approaches.

The increased adoption of CCA has led to the emergence of a growing body of work in CSCW and HCI that hopes to establish disciplinary orientations to CCA. In their systematic literature review, Cooper et al. [17] built up a cohesive understanding of our existing orientations to CCA in HCI by presenting a picture of the research process from establishing partnerships, to integrating collaborative practices, to sustaining research results. They also applied their analysis to propose changes to academic structures (i.e. funding and publication norms) and HCI methodologies (e.g., normalization of community contestation of design practices, project sustainability, and researcher

reflexivity) to support and empower communities and collaborators in this work. Prior literature has also explored methodological tensions specific to community engagement in computing and HCI through researchers' reflections on research experiences, naming how CCA can be used to legitimize and diffuse resistance to oppressive structures under the guise of inclusion [76], place epistemic burden on already underresourced communities [54], and privilege methods [38, 68] and temporalities [37, 58, 74] that are unaligned with the existing needs and practices of communities. It is important to note that these methodological tensions also call attention to the ways that CCA can have adverse effects on the communities we work with.

Several papers have called attention to how collaboration is realized through the relationships and historical contexts shared between community members and researchers [32, 38, 44, 47, 48, 69, 71–73]. These works highlight how the methods, challenges, and findings of community-collaborative research are deeply tied to the specific interplay of positionalities of the community and the researchers engaging in the project(s), including the contexts in which they are situated. In particular, Le Dantec and Fox [47, p. 1349] spotlighted the "work that occurs before the work: developing relationships, demonstrating commitments, and overcoming personal and institutional barriers" to make visible how our multiple subjectivities as researchers, collaborators, outsiders, and insiders inform the nature of our community partnerships. In considering our influence on our community partners and community-collaborative research, they encourage us to reflect on the ways these subjectivities inform our decisions, our relationships, our attunements, and our definitions of success.

Our paper hopes to contribute to an existing line of inquiry in HCI which attempts to share insights across community-collaborative projects in hopes of improving and systematizing the methodological considerations required for thoughtful and meaningful community-collaborative research. By synthesizing the personal accounts and experiences of the researchers we interviewed for this study, we hope to support and extend the knowledge surfaced in this prior work.

2.3 Relationality and care in CSCW, HCI, and Design

Considerations of relationality have played a role in the evolution of CSCW and methodologically associated disciplines like HCI, STS, and Design, though a majority of the conversations have primarily focused on the relationships between human and non-human actors [29, 43, 46, 66, 67]. In this vein, Kocaballi et al. [43] proposed *agency sensitive design,* which contributed to considerations of relationality in methodological approaches by attending to the heterogeneity and situatedness of human experience and action throughout the design process.

In recent years however, there has been more consideration of relationality *between* humans in understanding and designing for computer-supported cooperative work, particularly in conversations around care in CCA and other participatory approaches. CSCW and HCI scholars often draw from feminist theories of care (e.g., [20, 25, 77]) to note the presence of care in their research and/or community contexts, and, in doing so, discuss how relation makes the interdependent nature of caring possible. Many of these works propose the value of care perspectives in CSCW and HCI, examining how care can be a resource [41], a lens or orientation to research [39, 50, 73], and an existing (but undervalued or invisible) practice that can be better supported in community contexts [51, 58, 59].

In this way, the concept of relationality tends to be peripheral to care in CSCW and HCI research, though it is not necessarily neglected. In addition to prior work on CCA regarding the role of relationships in research collaboration (as in 2.2), scholars have also noted how research is co-constructed through the existence of caring relationships, both between researchers and participants, and between participants and research subject matter [39, 73]. Toombs et al. [73] discussed how close relationships that developed or existed between the researcher and participants affected the

data that was collected for their research, bringing up considerations for research validity and the personal vulnerabilities that may arise in these contexts. More recent research has expanded on this work by advocating for the prioritization of relationships and relational sustainability beyond the timeline of a single grant or technological project, with some scholars proposing that technologies may be more helpful in the ways they sustain and build relationships with communities they collaborate with than in their technical contributions [44, 45, 75]. Proposing that we can enact our political and ethical commitments by considering social relations as a domain for co-design, Light and Akama [50] encourage researchers and designers to consider how people are changed through our relations and interactions, and how increased consideration of social relations is part of (or may even be a core outcome of) the design process. Our work builds on these ideas of how relational networks can affect—or even become—research contributions by showing how community-collaborative researchers in HCI conceptualize and experience their work.

3 Theoretical Foundations: Relation

We ground our paper in theories of relation and relationality. Notably, we are drawing from Caribbean thought, Black studies, and Indigenous scholarship towards developing a conceptual framework of relation that we then apply to our findings. Thinkers and scholars from these disciplines help us understand relation in the contexts and histories of slavery and settler-colonialism, while confronting normative ways of relating that are "hierarchical, anthropocentric, capitalocentric, and hetero- and homonormative" [70, p. 5]. Universities located in the United States and other nation states with histories of settler-colonial extractions need to reckon with the relational possibilities they limit and enable both within the institutions and beyond [53, 64]. In our attempt to make sense of community-collaborative research practices in HCI, we draw upon theories and epistemologies of scholars whose works directly interrogate the academy's insistence on viewing communities at the margins of Western society as sites of research and "consumers of [tech-] commodities manufactured elsewhere from those goods—rather than as sites of politics" [1].

In what follows, we identify some characteristics of relation that we see as applicable to the conversations around computing, HCI, and research more broadly. Throughout our paper, we use both Relation with a capital 'R' and relation with a lowercase 'r'. Relation with a capital 'R' refers to Glissant's theory of Relation, as this is how it is denoted in his scholarship [55], while we use relation with a lowercase 'r' in the majority of our writing. Though Glissant's theory of Relation is foundational to our understanding of relation, we bring Glissant's scholarship into conversation with other theoretical traditions that have discussed relationality and relationships. In discussing relation, our goal is not to value one theory over another, but to give language to a core sentiment of CCA through the synthesis of both.

3.1 Relation and territory

In *Poetics of Relation,* Martinician (French-Caribbean) postcolonial scholar Éduoard Glissant theorizes relation – building upon the concept of rhizomatic thought (à la Deleuze and Guattari) [60])—as an arrangement "in which each and every identity is extended through a relationship with the Other" [33, p. 11]. The rhizomatic arrangement of identity, in Glissant's view, offers us a way of understanding Relation in contrast to "the notion of identity as a single root [...] seeking legitimacy on a land which, from that moment onwards, becomes a territory" [34, p. 37]. In order to understand community-collaborative research that originates from the academy, we need to understand the academy, in conjunction with the university, as a community in itself that largely follows single-rooted beliefs and practices around identity. For instance, theorizing the politics of land grant institutions and the single-rooted identity of landlords held by public universities, la paperson poignantly posits "universities do not exist in some abstract academic place. They are

built on land, and especially in the North American context, upon occupied Indigenous lands" [53, p. 25]. Moreover, recent critiques of the University of California campuses suggest interrogating the role of the public university as a corporate landlord, and how this single-rooted identity of landlordism shapes higher education [15].

A root identity, in Glissant's view, further "rooted the thought of self and of territory and set in motion the thought of the other and of voyage" [33, p. 144]. This voyage is often in service of the territory—expanding the limits of the territory while appropriating knowledge systems and practices from the other, albeit sometimes masked with charitable intentions. The other in this particular context is often marked by the university's settler-colonial impulses as they play out in stabilizing a categorical separation between "the university" and the "communities out there" as its essentialized *others*. Historically, these *others* were to be studied from a distance, or treated as sites to be visited for data collection; rarely to be seen as locations of theoretical, political, and epistemological possibilities themselves.**What does it mean then to understand the community-collaborative researcher positionalities within HCI who are in affiliation with universities, the same universities which carry particular impulses of expanding its hegemony on communities situated at the margins of its territory?** If we consider la paperson's identification of universities as "land-capitalizing machines," how can we begin to understand how community-collaborative researchers navigate and often take a critical stance against these impulses, instead following their desires of relating to research otherwise?

3.2 Relation and identity

Glissant further argues that despite the root identity of institutions and nations alike, the subjects within these institutional arrangements also often practice *errantry*, or wandering "as a search for the Other (through circular nomadism) rather than as an expansion of territory (an arrowlike nomadism)" [33, p. 18]. This voyage—at the crux of which is the urge to both challenge the rooted identity and to cultivate rhizomatic identity formations—allows us to form relationships with the Other that in turn change or shape our understandings of the self. The turn to CCA could be understood with such urge toward errantry. Researchers and university professionals who are tasked to carry out the territorial methods of the institution instead choosing to form long-term relations with research participants and sites of research. **Research, in this way, becomes a medium of self-knowledge for researchers revealed through relational exchanges with communities situated beyond the academy.** This voyage is often personal, generated from the researcher's own frustrations and discomfort of becoming an agent of territorialization, and thereby losing purpose or sense of self; often it is a decidedly political stance echoing la paperson's call to the struggle against the university's settler colonial machineries, "*deactivating* its colonizing operations and *activating* its contingent decolonizing possibilities" [53]. In either way, there remains an openness from the researcher to be transformed by the relationships formed and sustained by CCA.

In Glissant's words, errantry in the spirit of circular nomadism happens in "the image of the rhizome, prompting the knowledge that identity is no longer completely within the root but also in Relation. [...] The thought of errantry is a poetics, which always infers that at some moment it is told. The tale of errantry is the tale of Relation" [33, p. 18]. This meditation on errantry in the form of circular nomadism shapes our stance as researchers, informs our research questions, and also validates the study design and analysis. In considering the poetics of errantry (and relation), **we follow Glissant's conception of "poetics as a transformative mode of history"** [33, p. xii].

Switching our lens to a poetics (as opposed to ethics or even politics) of relation opens up a way to identify both the aesthetic and political potential of relation.[1] In doing so, we pay attention to not only the beliefs shared by our participants on how community-collaborative research ought to be done (guided by the *politics* of relation) but also how they themselves narrativize their relationships, their own identities, discomfort with territorialization practiced by the academy historically, and desire for errantry (thus paying attention to the more *aesthetic* constituents of relation). While HCI or academia's forays into communities at the margins of their territories have been historically driven by the arrowlike nomadism (i.e. "discovery or conquest"), the turn to community-collaborative research methods could be seen as a desire to engage with the Other through a poetics of Relation. Relation in this sense is distinct from the English word *relationship*, Glissant explains, and more akin to the French meaning of *Relation* as an intransitive verb. Research (i.e. the act of performing empirical or scientific inquiry) in Relation, therefore presupposes and is open to being informed by "not simply what is relayed but also the relative and the related." A core characteristic of this method can also be identified as how "its always approximate truth is given in a narrative [...] but because what it relates, in reality, proceeds from no absolute, it proves to be the totality of relatives, put in touch and told" [33, p. 28]. In approaching relation as a poetics, therefore, our concern is not precisely to distill best practices of CCA aggregated from the research methods followed by our participants. Rather, we pay close attention to how the relation shared between a researcher and their community partner is narrated, reminisced, and dearly held within and beyond an academic agenda.

3.3 Relation as a living practice

Relation is not only a theoretical and methodological orientation, but also a methodology in itself—it is "a way of being with methodological implications" [36, p. 128]. Cree scholar Shawn Wilson [80, p. 7] notes that, in many Indigenous onto-epistemologies, "... relationships do not merely shape reality, they *are* reality." Throughout his book, *Research is Ceremony,* Wilson discusses how **knowledge is formed and defined through relationships,** both through the existence of them (e.g., objects in Cree are not named, but described by their purpose) and through the interactions that they beget (e.g., more comprehension of other beings is gained when one develops more relationships with them). As researchers, considering relationships as the core of our understanding means considering our role in the relationships we have with our research collaborators and partners: Wilson emphasizes that "what is more important and meaningful is fulfilling a role and obligations in the research relationship—that is, being accountable to your relations" [80, p. 77].

Tynan [78, p. 597] further discusses how knowledge and understanding are built through the *practice* of relationality, because "[r]elationality is learnt from stories, watching our Old People yarn or sitting with Country – relationality is seldom learnt from academic journal articles." Referring to Indigenous relations to Country (i.e. the land) in particular, Tynan cites Graham [35] to name what it might mean to practice relationality, through "the sacralization of obligation and the putting of this obligation into practice via ceremonies, social structures, organizing principles, patterning (identity imprinting), laws, repetition of narratives" [35, p. 19]. In this way, **relationality requires attentiveness to obligation that can change the shape of all aspects of the research process**, from research design to analysis to application of findings: "[r]elationality demands movement alongside conceptualization" [36, p. 128]. Though, this also means that we must spend the needed time to understand what is required of us in our relationships rather than prioritizing

[1]Building on the works of Victor Segalen and others, Glissant's conceptualization of poetics specifically distinguishes the aesthetics of encountering the other from the moral (or, political or philosophical) obligation of recognizing the other. In his view, making space for shock, awe, and other affective responses to this discovery is what distinguishes the poet (and the poetics) [33, p. 29].

our academic outputs. Relational research practice cannot be standardized and over-simplified; we must meaningfully reflect on and practice what we learn from the words of Indigenous scholars to avoid the 'McDonaldisation' of relational research [26].

3.4 Relation as a politic

As mentioned above, a poetics of relation pays attention to both the aesthetic and political aspects of relationships. To be more explicit in our definition of politic, we review some key literature that is guiding our analytical lens. Echoing Anarchist HCI, in this paper, we refer to *politics* as an orientation to principles in relation to power and world-making [42, p. 2].

The conceptual foundation of world-making as a political orientation has roots in several intellectual traditions including Indigenous studies. Tallbear and Willey [70, p. 5] discuss how imagining nature and relationality differently is vital to the formation of new worlds ("re-worlding," in their words). Their article provides inspiration for us to consider the beings we are in relationship with in a variety of ways—"friends, real and imagined communities, humans we don't know, non-human-others, and the planet" [70, p. 14]—and how we can imagine being accountable to them. The authors redefine relationship ethics and what it means to care; relationality is not only found in a sense of feeling but through a sense of *relating* [70]. This means that our work takes on different ontological commitments to learn how to conduct relational research from historically suppressed ways of knowing, building relations between beings and entities rather than categorizing and separating the world into parts [36, 78]. In other words, to make new worlds, we must commit ourselves to knowing differently. Grounding us in an Indigenous ontology, Wilson [80, p. 11] reframes how research itself can be a ceremony, because "[t]he purpose of any ceremony is to build stronger relationships or bridge the distance between aspects of our cosmos and ourselves." Though this does not mean that every research process could be considered a ceremony, Wilson's work surfaces the values we could prioritize in our research practice. Referring to Wilson's discussion of research as ceremony, Tynan [78, p. 602] notes how "[t]he concept of ceremony helps emphasise and perform the transformative potential between entities, rather than focus on entities as separate and individual beings." In this way, **we may begin to engage with relation as a politic by centering understandings of the world that are defined by the distance between ourselves and each other—a state of the world which we can affect—and interrogate how collapsing that distance can transform our world(s)**.

4 Method

4.1 Participants and Recruitment

We recruited eighteen academic researchers who collaborate with community organizations and/or community members for computing and technology research. All participants were located in computing departments (e.g., human-centered computing, computer science) or Information Schools in the U.S. and the U.K. Details regarding participants' roles, seniority, and research themes are listed in Table 1.

As our paper centers the role of relationality in research, we aimed to take a relational approach to participant recruitment. It would be unrealistic—and limiting—to require participants to have a relationship with the first author prior to the interview, so we defined relational recruitment as developing some sort of connection or rapport before inviting participants to participate in the study. This connection could either be direct (e.g., having a conversation before the interview) or indirect (e.g., being introduced through a mutual connection). Defined through the language of standard HCI recruitment methods, we primarily recruited participants through word-of-mouth, snowball sampling, and convenience sampling. Our recruitment method is similar to that of prior research

centering the experiences of HCI researchers [23, 49, 63]. In purposively sampling participants, we often sought out participants whose work seemed somewhat motivated by social impact and social justice. However, participants recruited through snowball sampling were not included or excluded based on any considerations of their work; rather, we recruited them based on other participants' recommendations that we should talk to them because they used community-collaborative methods.

At DIS 2023, the first author invited researchers to participate in the study if they perceived the researcher's work to meet our recruitment criteria. This occurred in several ways: 1) being approached by the first author due to a mutual connection, 2) following research presentations, 3) socializing and casual conversation, and 4) introduction from others.

The first author also recruited participants through text or email if they had an existing relationship or mutual connection with a member of the research team. Recruitment efforts lasted through July and August 2023, though one participant was recruited at CSCW 2023 in October following an especially rich conversation about their experience with a community-collaborative project.

Since community-collaborative research is a relatively small community in the DIS, CSCW, and CHI communities, we did not collect participant demographics to preserve anonymity. We prioritized confidentiality through this process to encourage participants to feel comfortable sharing their experiences without fear of professional consequences, or of violating personal or institutional research ethics. However, we recognize and acknowledge that participants in our study are academic researchers in various roles and seniorities who interact with their respective communities not just as institutional representatives, but as full people with their own gendered, racialized, and otherwise contextualized positionalities.

4.2 Interview Protocol

All interviews were conducted individually with the first author. Interviews were unstructured but loosely guided by a set of questions (also known as an *aid memoire* or agenda [83]), with the intention of fostering a more conversational interview experience. In unstructured interviews, the interviewer often deviates from the performance of the rational and detached researcher, acknowledging their positionality in guiding and making the space for discussions to arise [27]. The first author, an early career Ph.D. student at the time, approached the interviews as a novice to CCA in computing research, situating the interview in a personal desire to learn from and about participants' experiential knowledge.

The flexibility of unstructured interviews allows for deeper, more exploratory data collection, since the interviewer is able to pursue paths of discussion specific to the context of the interview, including both the interviewer and the interviewee's unique positionalities [16, 83]. To avoid inconsistency, we specifically formulated a set of guiding questions which were not intended to be followed by the interviewer, but instead intended to be reviewed prior to each interview [13, 56]. Our guiding questions focused on relational aspects of research, such as the relationships between researchers and communities; communities and research/academia; and researchers and research/academia.

Interviews ranged from 40 to 74 minutes (mean 54 minutes). Nine interviews were conducted in-person, and nine interviews were conducted remotely on Zoom or Microsoft Teams. One interview was a walking interview, inspired by Prost et al. [57]'s findings that walking methods can decenter the researcher and further support a sense of conversation in interview contexts. Two participants emailed extra comments to the researcher after the interview.

Interview transcripts were sent to half of the participants (N = 9) after transcription to allow them to clarify their statements if desired. However, the majority of these participants did not view the transcripts and this process led to a delay in compensation and updates, so we did not send

Participant ID	Academic Role & Status	Research Themes
P1	Postdoctoral Fellow	Equity and entrepreneurship
P2	Ph.D. Student	Community health
P3	Ph.D. Candidate	Surveillance infrastructure
P4	Postdoctoral Fellow	Food justice
P5	Professor (Tenured)	Digital civics
P6	Assistant Professor	Labor and social justice
P7	Assistant Professor	Accessibility
P8	Ph.D. Candidate	Housing justice
P9	Research Scientist	Indigenous communities
P10	Ph.D. Candidate	Race and health equity
P11	Ph.D. Candidate	Education
P12	Ph.D. Candidate	Health equity
P13	Ph.D. Student	Labor
P14	Professor (Tenured)	Civic infrastructure
P15	Assistant Professor	Race and social justice
P16	Assistant Professor	Health and wellbeing
P17	Professor (Tenured)	Labor and social justice
P18	Assistant Professor	Volunteer communities

Table 1. Anonymized Participant Information

transcripts to the latter half of participants. Later, we sent the first and final drafts of our findings to participants to validate our interpretation and presentation of participants' quotes.

All participants were compensated $40 USD for their time. Our study was granted exempt status by our university's Institutional Research Board (IRB).

4.3 Data Analysis

We conducted our data analysis with Braun and Clarke's reflexive thematic analysis [10]. After conducting interviews and reviewing the transcripts, the first author coded the transcripts with an inductive approach, constructing codes through careful reading and interpretation of the data while considering similarities they noted between interviews, particularly around interviewees' sources of frustration, uncertainty, and sentimentality. After analyzing seven transcripts, they aggregated codes into broader groups before discussing the codes with the second author. Given the focus of the study, analysis and sorting was done with an eye toward participants' relationships with their community partners, academia, and themselves. For example, the codes "heterogeneity," "directly researching/working with community members," "relationship with partner orgs" (under the code group "intermediary relationship"), "local partnership," and "recruitment methods" were grouped under the broader code group "community partnership dynamics."

Afterwards, we engaged in an iterative process in which the first author coded the rest of the transcripts, intermittently rearranging and developing the codes and groupings into themes with

the second author. We were influenced by our engagements with theory and related work in rearranging the codes into the final themes as seen in this paper. Returning to our example, the code group "community partnership dynamics" ultimately became the basis for the theme in Section 5.1.1. For this, we added the code "personal experiences" to the code group, and the code "heterogeneity" became a framing perspective for the theme, while the codes (excluding "local partnership," which became insignificant to the theme) ultimately became the categories as detailed in the section. Finally, we organized the themes in relation to our research questions, which led us to present our findings with consideration of the beginning, middle, and end of the community-collaborative research process in Section 5. The first author wrote and shared analytic memos with the second author throughout the aggregation, grouping, and theme development processes.

5 Findings

In the following section, we present findings from our interviews with CSCW and HCI researchers about their experiences with CCA. With a particular focus on the role of relationships throughout the research process, we detail how participants approach community-collaborative research and how their disciplinary contexts and academic communities affect their community partnerships. We begin by discussing how participants' research approaches affect how they build relationships with community members and partner organizations. We then describe how these relationships are enacted through research ethics and collaboration practices. Lastly, we share participants' challenges to maintaining their relationships and their long-term considerations for community partnerships. Given the geographical positionalities of our participants, our understanding of community and relationships in CSCW and HCI largely emerged from American and British academic understandings of these topics.

A note on "community" and "community-collaborative approaches" as considered in this paper. Given that the content of our findings is influenced by the participants we recruited and interviewed for this study, it is important to note that our interest in CCA is informed by previous work on social impact and HCI methodologies calling for greater participation in the research process (as discussed in Section 2.1). As such, an underlying idea in this paper is that CCA considers the ways that technologies can exacerbate and create inequitable social conditions, and thus that community-collaborative researchers often have an interest in social impact and social justice. Because of this, we did not recruit based on the definitions of "community" and "community-collaborative approaches" as mentioned in Section 2.2. We also did not explicitly seek out definitions of "community" from our participants; conceptualizations of community in this paper are based on how participants self-selected into our study and how they discussed community partners (i.e. as outsiders to academic community) in our interviews.

We use the term "community organization" to refer to grassroots, non-profit, and governmental organizations that serve a particular population of people (e.g., proximate communities, identity-based communities). We describe our understandings of the relationships between different community organizations and their community members in Table 2. These categories were based on our data, so they may not be representative of the full scope of community collaboration in HCI. The examples given in the table are fictitious.

5.1 Building relation

5.1.1 Categorizing collaborative approaches with community organizations among our participants. In our findings, we saw community organizations serving distinct roles in our participants' research projects; these roles can be roughly categorized into four major groups: 1) thought partners and/or co-investigators, 2) liaisons to primary stakeholders, 3) community advisory boards, and 4) sites of inquiry.

Type of community organization or partner	People who are considered part of the community	Example
Grassroots organizations, affinity groups, unions, tribal councils	Members of the organization	A local mutual aid group
Non-profit organizations	Depends on the positionalities of the people in the organization	A cancer foundation
Government-based organizations	The people served by the organization	A county-wide housing authority
Community advisory board	Members recruited based on their interests and some aspect of their positionality	A group of women with ADHD without prior relationships who meet once a week with a researcher

Table 2. Models of community organizations and communities

Role of community organizations in a research project	Participants
Thought partners and co-investigators	P1, P2, P3, P4, P6, P9, P10, P11, P13, P14, P15, P16, P17
Liaisons to primary stakeholders	P4, P5, P7, P11, P15
Subgroups & community advisory boards	P4, P7, P9, P10, P12
Sites of inquiry	P2, P8, P18

Table 3. The roles of community organizations in participants' research projects

In Table 3, we list the various approaches to community collaboration as practiced by our participants. Some participants are listed in multiple rows because their relationships with community organizations changed over time, or because they had multiple projects with different approaches to community collaboration. These categorizations may not be comprehensive, as they are based only on the projects the participants discussed with us; however, they give us a picture of the role of community organizations in existing CCA.

Community organizations as thought partners and co-investigators. As noted in Table 3, the largest proportion of our participants had experience collaborating with organizers, practitioners, and leaders of community organizations to create and enact research and community projects. In these collaborations, researchers typically worked with community organizations to determine how they could "merge [their] interests together and use [their] collective resources in a way that can benefit community" (P2). Researchers would often collaborate with community organizations to recruit from the organization's network and engage this larger group of community members through activities such as workshops and interviews. Oftentimes, participants also discussed collaborating with these community organizations with tasks unrelated to research.

Many participants described a sense of alignment between their partner organizations and the community they served, but some participants like P4, P10, P15, and P16 noted tensions between

them, typically in regards to decision-making. It should be noted that all of these researchers' experiences were described to be with government-based organizations. For example, P16 described why they eventually stopped collaborating with an educational organization: "I became not quite so sure that I was solving the right problem, because I was solving a paperwork problem that the staff were burdened by... but I was contributing to systems of oppression that were defining disabilities in certain ways and tracking behavioral data." Though P16 attempted to work with the organization to move away from problematic data practices, they ultimately decided to end the partnership because they felt that the needs of the organization were too embedded in the norms of a broader system of oppression.

Community organizations as liaisons with primary stakeholders. For some participants, community organizations acted as liaisons to stakeholders (sometimes as identified by the researchers alone or by the organization and the researchers together). P4, P11, and P15 described taking this approach because their relationships with the community organizations changed over time, while P5 and P7 described being connected to the community organizations by someone from the organization itself or other community partners, respectively. Relationships did not always change for the same reason. P11 described a change in relationship based on the organization's engagement: they met regularly with a community organization for the first few years of their collaboration "and now... [the partner organization is] a little bit more hands-off, but [the researchers] have access to their resources," including their ability to contact stakeholders and other organizations. For P4, the relationship with the organization shifted because P4 wanted their collaboration to be more directly driven by the primary stakeholders of the research.

> "...they're providing services and and hoping for people to show up, rather than creating a space for people to develop their own ideas. [...] And only like a year or two in, I was like, I need to press the stop button here and kind of step back from this work that we've been doing and work more directly with the community members. And that shifted a lot of my approach to the community work. So I was then trying to reach out to local people."

On the other hand, P5 described how they were approached for their specific expertise by a leader of a community organization who was interested in bringing a specific technology to the community, and how "she would help [the researchers] recruit and get people to come to our workshops and generally promote [the technology]" to community members. For participants like P5 and P7 (and later, P11), community collaboration meant connecting to relevant stakeholders because someone thought their expertise would be beneficial.

Subgroups and community advisory boards. Several participants collaborated primarily with a subgroup of community members, which they sometimes referred to formally as a community advisory board (CAB). P10 adopted this approach after primarily collaborating with a community organization, while P7, P9, and P12 started projects with this approach. Some subgroup collaborations developed through a formal recruitment process (P10, P12) or through connections and existing relationships (P7, P9). The development of P7 and P9's collaborations were more circumstantial, both beginning with the act of conversing and relationship building. P9 discussed how one of their projects developed out of community building workshops:

> "[M]y whole goal for two years was to build a lot of new relationships with folks. And instead of just doing that, we had this amazing thing, where—out of one of our workshops—we had a group of folks that were really passionate about this research idea. And so they said, 'We're gonna try,' and I had kind of given them some examples, like, these are the sorts of things that could fund these sort of ideas."

With this approach, participants often had to make space for community building because they did not have existing organizational norms to define structures of accountability and collaboration. These participants described interfacing with the community members in their groups or CABs as thought partners and co-investigators, noting that their collaborators "more closely, on an individual level, drive the stuff that they do in [their] research" (P10) from project ideation to data collection and analysis to writing.

Community organizations as sites of inquiry. For P2, P8, and P18, community-collaborative research projects arose from long-term community collaboration and participation not related to the specific research questions that were ultimately studied at these sites. All of these participants volunteered as members of their respective community organizations before developing their research projects, which were eventually inspired by their observations and experiences regarding technologies in these organizations. For example, P18 decided to do a research study in the community organization they were a part of after the organization considered updating their "cobbled together" volunteer management system:

> "... this was just stuff I did for fun... but it also did teach me a lot about organizing—about what was motivating community for a lot of the research questions I cared about. [...] We would be thinking like, 'Okay, hey, this system has been around a while, maybe it would be good to evaluate it, redesign it and redeploy it, like have it better function for our needs?' And so I ended up being like... There's some interesting questions about technology that have arisen. Maybe I should do a study."'

These participants felt that combining their research and community organizing interests allowed them to contribute more substantively to the community while still contributing to the academic community, and their collaborative practices with their community organizations centered more around shared organizing agendas than shared research agendas (see Section 5.1.2). In consideration of existing academic discourse on power sharing and participation in the research process [18, 38], P2 and P8 mentioned trying to engage community organizers into the research process, though these community members were seldom interested in contributing. (We further discuss this dynamic in Section 5.2.3.)

5.1.2 CCA as sociotechnical perspectives in practice. CCA are grounded in an understanding that technology and society are intertwined, i.e. a sociotechnical perspective (see [14]). Participants often acknowledged how community members' needs or concerns are so deeply tied to systemic and structural issues that while these concerns "can be patched with using technology, it is not going to solve the problem at large" (P15). P11 reflected on how CCA expose the relationship between the technical and the social, because "you start to not only think about how people engage with technology, or how to create something novel, but you also kind of uncover one power dynamic to what is the systemic inequality or structural problem that you are working with, which the technology is embedded within." In our interviews, we noticed there were two ways that a sociotechnical perspective played into participants' CCA: some projects primarily focused on understanding and designing technology with respect to social relations, while some primarily focused on understanding social relations with respect to technology.

Having a technical focus to a sociotechnical lens. Some projects started with the understanding that there were potential or existing technological needs in the community to support or contribute to, such as "work[ing] very closely with [community members] to build something that is very tailored to them" (P5) or studying technology in situ (e.g., an impact assessment by P6). For these projects, research implications were a direct contribution to the community, and the

researchers were connected with their community partners for this reason. For P13, this meant making sure to develop the social infrastructure around their technical artifact with their community partner:

> "So, really looking at it as a collaborative process of almost designing a sociotechnical system, where I worked a lot with other [community members] to understand how they do stuff, and then sit down with them and write down manuals of like, how do we want to handle new [members] coming in registering into the system being handled... and then training up all of that, being very systematic and documenting it, and always doing it with one other person."

P13's quote also demonstrates how CCA relate to a sociotechnical lens; collaboration can be central to considering the social structures around technology, because people need to know how to use and maintain the technology for it to continue being useful to the community.

Having a social focus to a sociotechnical lens. Some of our participants prioritized identifying implications for HCI design and methodology over technological end goals. In these cases, the projects were left more open-ended and "focused on these abstract concepts like culture and the influence of culture" (P10) for technology use and design. More often than not, these were projects stemming from the relationship between the researcher and the community without the goal of a specific technology-related outcome for the community. Referring to prior discourse in HCI that relationship building is "the work before the work" [17, 47, 82], some participants with this orientation questioned dominant approaches to research in HCI, expressing that the normative perception of volunteer engagements and relationship building as unrelated to research "really depends on how you define research" (P3). P4 described how relationships are central to community-collaborative research and how they integrated that into their research output:

> "I'm interested enough in relationships that I found it fascinating also from a research perspective, and kind of unpicking those dynamics. [...] I think if you are in the space of like, doing community-based research, relationships... needs to be just part of your work. It's not before the work. It is part of the work."

For these projects, research contributions were meant to benefit their academic community rather than their community partner. Participants felt that the value of academic research to their community partner was in sharing their access to institutional power and resources rather than in intellectual contributions. Sometimes, like for P2, community partners cared more about the capacity or material resources that researchers could offer, even if the work provided a new perspective on the role or effect of technology in their community.

These experiences demonstrate how community-collaborative researchers are not only motivated to contribute specific technology-related solutions for a community they are in relation with, but also recognize the value of offering resources and capacity to which they see themselves having unique access. They demonstrate how CCA is often chosen in response to complex sociotechnical problems, and the communities in question may not always identify a technical fix—or scientific research more broadly—as the desired outcome from CCA, encouraging us to interrogate how a researcher can negotiate the role and purpose they embody in relation to community partners.

5.1.3 Research can change relationships. Many participants felt that CCA was not only an act of knowledge co-production, but also "co-producing a relationship together" (P3). This act of developing a partnership—and, by extension, a relationship—was not pursued lightly by our participants. P14 explained that they see accountability to community partners as a long-term commitment beyond research and funding timelines, and they "always feel accountable to [their] partners... [and] you shouldn't commit to a project if you're not willing to commit once the funding's done."

Many other participants shared experiences that reflected how community-collaborative research is not a self-contained method; namely, how CCA reconfigured relational structures and initiated friendships. For many participants and their communities, research led to the formation of new relational networks. For P3, this was one of the primary contributions of their work:

> "But I think at the end of the day, [research impact] is something like the relationships that we have with each other. Even the relationships that community members build with one another. Like, [a community member] may say ... 'In the past, when I [saw] so and so, I never said hi to them, but now after this project ... we're actually friends, we can help each other out."'

Similarly, other participants like P14, P4, P8, and P7 shared how their research relationships have led to more longstanding involvements with their respective communities, through non-research engagements such as personal contributions to group actions or mutual interest in personal projects. Many participants also described the development of personal friendships with community members they met through CCA engagements. However, developing a research partnership can also complicate existing relationships with a community. P18 pursued a project with a community organization of which they were a long-term member, which they found challenging:

> "I would say dissertating, like doing the academic stuff, at that time in my life was a source of stress, and being part of the [community organization] at that time in my life was a source of joy. And I'd hoped to combine the two with the idea that the joy would compensate for the stress. It ended up being that the stress compensated for the joy. [...] I don't know whether that's a universal experience that everyone would have. But if you're the person doing the research and doing the community engagement, [you've] still got one brain that's going to be in both places."

For P18, combining their identities of *community member* and *researcher* into *member **and** researcher in the community* changed their experience in the community for the worse, because it required them to bring stress into a previously joyful place.

5.2 Understanding and enacting relation

5.2.1 A relational approach to ethics. Our participants expressed consideration of whether their projects were mutually beneficial for community partners and, as such, made sure to be mindful of community collaborators' existing approaches, values, and desires in their research practice. Participants were attentive to existing discourses around methodological tensions in CCA (as discussed in Section 2.2). For example, prior work in HCI discussed how some communities (as research subjects) often feel neglected and exploited by institutions because researchers previously failed to provide direct benefits to community partners or failed to follow through with community-collaborative projects [38]. P4 caught onto this dynamic when a community-collaborative project they were involved in was scrapped by funders:

> "I think I could sense a certain resignation, because they've seen this a lot of times that people come in and promise certain things [...] and then nothing happens. And there's just definitely this high level of resignation among a lot of [community members] which just don't get involved in anything anymore, because like, what's the point? And research could be no different. There's a real danger and ethical obligation of researchers to not come in with empty promises, or manage expectations really clearly."

P4's experience describes how a researcher's failure to follow through with a project may not only be momentarily disappointing for community members, but also broadly consequential in how it can diminish their belief in collaboration as a vehicle for change. In the quote above, P4 refers to the

acts of managing expectations and avoiding empty promises as an "ethical obligation" and attends to the consequences of betraying this obligation. In doing so, they implore us to consider how it is a moral imperative to attune to the histories, ongoing experiences, and futures of those we are in relation with and to hold ourselves accountable to our relationships in community-collaborative research.

The participants also expressed a sense of accountability toward themselves. Accountability to self was expressed as caring for personal well-being and avoiding burnout, as well as "reflecting on your own values and your own role" (P16). In this way, many participants' sense of accountability to themselves was deeply intertwined with their commitment to their community partners. This commitment was expressed not as an obligation, but as a desire, speaking to the relational and affective nature of ethics in community-collaborative research. P7 felt personally motivated to prioritize their relationships with their community partners because they felt so grateful for the impacts of their collaboration and wanted to return the favor:

> "I really have to prioritize what matters most to me. And what matters to me is the relationships over the research. [...] I force myself to make time for [my community partners' other endeavors] because these people have done so much for me. Like, I wouldn't have a dissertation if I didn't have them. They changed my whole life. The methods that I use, and my perspective on research, and my perspective on other human beings have changed significantly, and I almost feel indebted to them."

We see that researchers who use CCA follow a relational approach to ethics because they feel a responsibility to prioritize their relationships with collaborators and themselves. In adhering to this, many participants (like P7) noted regularly doing work with or for their community partners that was unrelated to research. We later discuss in Section 5.3.1 how this relational work is often undervalued in computing, and how that can create extra challenges for researchers using CCA in HCI.

5.2.2 Relation as a responsibility. Our participants also shared how their responsibility to community collaborators played out alongside or through their relationships with their academic collaborators. In our interviews, participants noted how CCA can introduce additional considerations to the work dynamic between advisors and advisees, as researchers must determine who will build and maintain relationships with community partners. Participants like P1 noted how the tension between temporality and capacity in academia poses a challenge to planning the relational mechanics of a community partnership:

> "... who should be the main interface for these projects? Should it be transient students? Or should it be someone who is here probably a little bit more on a longer timeline... the faculty who are maybe not likely to be doing the in-person field work, but they are going to be here longer?"

Participants primarily described two different approaches to division of responsibility in community-collaborative research: students supporting faculty members' relationships with community partners, and faculty supporting students' research with community partners.

Students supporting faculty members' relationships with community partners. Limited time and capacity required participants with Principal Investigator (PI) roles to delegate most community collaboration-related tasks to students or other academic collaborators. P7, a faculty member who continued collaborating with some of their partners from their graduate research work, mourned that they "can't be as involved in the development... as much as [they] want to be a part of that" before describing how they were careful to recruit students who they felt could be thoughtful collaborators with community partners. Relational management was a common theme

amongst PIs. P9, a research scientist who was the PI for several distinct community-collaborative projects, also expressed the importance of "knowing the community and knowing the students and knowing that... you're bringing them both towards [a relationship] that's going to be healthy" to protect both the community and the work they are doing together.

A few participants described research relationships that were primarily maintained by students but established by advisors and advisees together. P2, a Ph.D. student who regularly volunteered with their community partner, felt it was important for faculty members to engage more closely with community partners if they were claiming a personal connection to community-collaborative research:

> "Faculty... I think one of the critiques I have is that a lot of them say that they want value of community-based work and doing community-based research, but they don't put in the work. And they are not engaging with these communities directly. It may be like a one-off like, 'Oh, let's have a meeting here.' But they're not meeting regularly with them. They're not building relationships with them. They don't get to know people's everyday lives. Or know, you know, what they do on a day-to-day basis. It's not building any personal relationships. It's all like, within a closed room setting like this, where we're very professional."

Though P2 was ultimately sympathetic to faculty members' lack of broader capacity, their critique calls attention to how delegation should be more carefully considered in community partnerships, especially if a partnership will be taken on by faculty members in the longer term. P2's quote also encourages us to consider what it means to consider relation as a responsibility (and, by extension, to *practice* a relational approach to ethics), especially when research relationships are going to be maintained long-term.

Faculty supporting students' research with community partners. In other cases, students held primary or sole responsibility in determining the direction of the research and community relationship. Some faculty members felt they were better equipped to support students in their roles because they had a more long-term picture of impact that spanned many projects. P16 discussed how the dynamics of applying for grant funding meant that students were better at leading community-collaborative research, because they had to "juggle multiple different projects, whereas [their] students are the ones that can spend more time with individual partners and maintain those relationships." The manner of support also could differ based on an advisor's capacity: P13 mentioned that "after [their advisor] got tenure, she got way more involved in community work and community-engaged projects."

It was intuitive for some researchers to establish and/or build their own relationships with community partners as students (e.g., P8, P10, P12, P18) because their research was unique to them and their interests. P8 also felt it was valuable to have built their own community partnership because of how challenging it was to navigate between their relational and academic priorities:

> "And if there's advice, I would say: go and try to build a relationship yourself, if you really want to know what it would be like to do community-based research. You know, I think there's a lot of [advisors] who... have their relationships already [...] I think so much of what you miss in that is all of those really awkward, stressful, but really important moments of like, what does it mean to do this weird dance of like, 'I am a researcher, but I also want to support your organization and be a part of it."'

Some advisors also felt that it was important to foster that for their students. These advisors considered their "role as being there to support [their] students, that may be helping them through the design process, [and] that may be helping them think about how to structure that relationship with the community groups that they're working with" (P14).

5.2.3 Collaboration in practice. Prior studies in HCI—and some of our participants—have advocated for researchers to collaborate with communities from the beginning to the end of a project [17]. Although, as shown through the findings so far, all community-collaborative projects are "challenging in their own ways or they're unique in their own ways" (P3). Every researcher has a unique relationship with the specific community partner(s) they work with, and our participants' methods of collaboration varied project by project.

Broadly, participants expressed a desire for their research to be non-exploitative and beneficial to their participants. For example, P4 felt that "the act of participation itself should be valuable and interesting." However, many participants also felt that their ideal approach to community collaboration was challenging to enact in practice "because [community members] all have their own lives ... [agenda setting] is not as much of a priority for them" (P12), surfacing how community partners and researchers have different relationships to the research, even if the researcher makes space for power sharing and equal engagement.

In reality, some participants had a lot more success collaborating on various aspects of research with their community partners than others. P7, for example, described how they "would circle and circle and circle and ideate together" with their community collaborators on project design, analysis, and writing, and how their collaborators also ended up leading the interview sessions with their support. On the other hand, some participants discussed how, for their community collaborators, certain aspects of research "[don't] hold any currency in their world" (P16) and community collaborators "don't always have capacity to take on a larger role in the research" (P12). In these cases, community collaboration was more low-key: P17 noted how member-checking enabled their community partner to enact "subtle but consequential change in who the critique was targeting" in their paper, which later made the paper helpful for their community partners to send "both to funders and to politicians they were trying to move."

Given that academics have a particular view of the world, "sometimes [researchers] care so much about [certain] issues, and then you find out the community doesn't care at all" (P9). P17 felt that it was important to build up enough of a relationship with community partners to know what aspects of collaboration they care about:

> "... the relationality is really more like being... ongoing-ly accountable enough, where... you have enough of a sense of like, what's important to people, what's less important to people? To know when, how to bring them in, in ways that are not also dragging them down? And [with] all the weirdness of academia?"

Similar to how some participants described focusing more on material contributions to their communities over research contributions (see Section 5.1.1), P4 discussed doing two distinct rounds of data analysis: one with their community collaborators that is more "unstructured," and one for publications:

> "... it's facilitated, but... it doesn't follow a thematic analysis methodology. It's just making sense as a group of that data that I bring in. And then, at the end, deciding what are the actions to follow all of that, and the actions is the interesting bit. There's obviously implicit... knowledge generation and so on. But then I would go away, and do the academic analysis for myself for publication. And sometimes that feeds back in terms of refining some of the insights, or sometimes it would be contradictory, perhaps. But my experience is that people are not very interested in publications."

Through the relationships that they had developed with their community partner over the course of their collaboration, P4 was able to come up with a way to collaborate on analysis while making sure it was important to their collaborators. This example, along with the other experiences of

our participants throughout this section, encourage us to consider how enacting collaboration equitably in practice requires an understanding of the relationships we have with our collaborators.

5.3 Sustaining relation

5.3.1 Department cultures & misalignment with CCA cultures. All of our participants had comments on how technology cultures in academia create challenges in enacting the relational orientation required for CCA.

Participants who described a lack of departmental support or infrastructure for CCA shared how they experienced extra pressure as community-collaborative scholars, even though the work was personally fulfilling. Pre-tenure faculty members described how "people fundamentally misunderstand community-based and community-led work as service [...] and service is very undervalued in academic community" (P6). It was especially notable to these participants that "nobody's gonna care on [their] tenure committee" (P7) because their work supporting their community partner did not culminate in an abundance of papers or some other type of contribution to the *academic* community.

Students in these environments described being unsure of how to best approach CCA because it requires a deep interrogation of the research orientations typically practiced in computing departments. Even though their department was supportive of CCA, P10 struggled to know how to balance department expectations and community needs without a department-based mentor who was experienced in CCA, and "the pressures of PhD student-related timelines really messed up [their] priorities." On the other hand, P1 shared how it was helpful when their department hired more faculty with expertise in CCA, because it enabled them to better navigate challenges as a PhD student and learn the necessary translation work required to advocate for CCA:

> "... now versus then, there is much more of a culture of community-based methods within [my department]. [...] Which has been helpful for communicating to whom I'm accountable within academia, like what exactly I'm accountable for, because I think that that wasn't clear when it came to my academic superiors. And so, that took a fair amount of communication work on my end as well, which is not an easy thing to do as a PhD student when navigating the levels of seniority and all of that stuff as well."

Participants who felt their departments were more amenable to CCA typically drew a picture of established methodological diversity in faculty composition, consistently noting that their departments had several senior faculty members who employed CCA. P14 attributed this to the fact that "from the start [...] in this program, the idea was to have a pluralistic approach to computing," alluding to the underlying department culture that informed their assessment practices and metrics. Other participants like P15 and P16 shared that their departments used different metrics for assessing the progress of community-collaborative researchers, and that "a lot of the reason [junior faculty members are] protected is so that [they] can do that kind of work, otherwise [they] wouldn't do it well" (P16).

However, even in departments that were described as more amenable to CCA, many participants—particularly students—explained how the technical orientation of computing and HCI led them to feel undue pressure to meet research expectations that are misaligned with the needs and goals of CCA. In particular, many of our participants felt the pressure to publish frequently due to the conventional pace of research in computing fields. However, as expressed by P8, CCA requires understanding the broader context around the research and relationship building, which can affect the academic productivity of a community-collaborative researcher in comparison to their peers:

> "If any of it becomes research, you're taking multiple years of work, and parsing a sliver of it out for a paper. Because maybe you're only—at least in our field—parsing

> out the technical aspects of it, right? And so the pace of research, if you do make that research, is a lot slower. Meanwhile, if you are in a technical department, people aren't beholden to... They can almost set their own timeline. And so there's the pressure you feel amongst your academic peers, when you can't just churn something out in the same way."

In this way, P8 (and other participants like P1) establishes how researchers who do CCA must interrogate and challenge dominant research practices in computing because researchers who use CCA are beholden to the timelines and priorities of their community partners. Taken together, for community-collaborative researchers to thrive, computing and HCI departments must meaningfully consider how the relational commitments of CCA make them different from other research approaches in computing with regard to methodology, temporality, and impact.

5.3.2 Long-term considerations for relationships with community partners. The maintenance and sustainability of community relationships was a common topic of interest in our interviews; as discussed before in Section 5.2.2, there was a lot of consideration of the capacity of students in comparison to the longevity of professors' roles in determining who should develop a relationship with the community partner. The participants discussed several different approaches to maintaining relationships over time.

Some faculty felt it was important for them to develop their own relationships with community partners because they felt that a partnership was a commitment to a long-term relationship. After P6 reflected on their own experience leaving a community partner as a student, they discussed their attempts to support these relationships responsibly as a faculty member:

> "... when I let our partners know that I was going to be moving for grad school to go to [another city]. They took me outside, literally, and asked, 'How do we make sure that the next person is going to be like [you] and not like those people that came before?' [...] I think about it often as a now faculty member, like how to responsibly sustain those relationships in a way that it doesn't feel so dire, say, if somebody like a student needs to go and do an internship, or moves away for their own kind of personal professional opportunity."

For some participants, these complicated dynamics of long-term community partnership meant that "it just comes down to expectation setting... where you have to make sure that people understand that we will leave" (P1). P3 discussed having a hard time navigating leaving their community partnership and discussing it with a community partner, who expressed his support for this change because of the personal connection they had:

> "... this is something I've been navigating as something that is really hard for me to think through. I was literally talking about this with one of my community partners like, "What happens next year when I'm leaving?" and he was literally telling me, "[P3], we're proud that you're leaving, we are proud that you're you. You're going to move on, we are proud you're becoming a doctor."

P3 later named how their community partner suggested that P3 "can introduce [them] to a different researcher from [their] research group, or maybe another student can continue the work [they've] been doing." Several participants noted mentoring and passing on community partnerships to other students, either for themselves (if they were students) or for their other advisees (if they were advisors).

Several participants considered the potential (or existing) role of their institutions in helping to sustain community partnerships, through monetary or structural support. P6 was working "to develop and push on institutional supports that might provide more material support [and]

longevity to the project... that doesn't just rest on a grant to grant cycle" because they felt that their university should not only celebrate but actively support community-collaborative work. P16 gave a picture of the institutional support that already existed at their university, demonstrating a model of possibility for this kind of structure:

> "... there's multiple types of these centers affiliated with the university. And so their role is this sort of matchmaking... they're staffed by people whose job it is to go out into the community, learn about what's going on, and build relationships with people who might be interested in partnering in research, and then coming back to the university so that when there's faculty like me, who are like, 'Hey, I'm gonna do this,' they can make introductions. There's also some grant funding that we can then apply to to get those kinds of partnerships started."

P4 also discussed trying to figure out "where's the right place for [community partners] to kind of dock" in the university while also being somewhat hesitant to do so because they "don't know what these people are going to do with these relationships" and "it's so much based on personal trust... you can never replace that." However, they did feel that the establishment of an intermediary or point of contact could be helpful to sustaining relationships between community organizations and researchers more broadly.

6 Discussion: Conceptualizing *Research and/as Relation*

Research and/as relation synthesizes the seemingly opposing natures of computing research and relation to gesture towards how the two must be co-constituted if we are to maintain the ideological commitments of CCA. In this section, we will synthesize our findings with theories of relation to discuss 1) the ideological and practical misalignments between research and relation and 2) the ways that researchers who use CCA bring together research and relation nonetheless.

6.1 Research *and* relation

To develop our understanding of the relationship between research and relation in community-collaborative computing research, we must first consider the historical impact of academic institutions on the communities around them. Speaking to the tensions that arose in a partnership between their university and a local community organization, Sum et al. [69] discuss how community members often distrust academic researchers because they or someone they know have felt studied and taken advantage of. Their work describes how class- and identity-based differences impact community members' experiences of researchers, particularly when researchers do not invest in the community despite their reliance on its participation in their work. Similarly, as discussed in Section 5.2.1 and work such as [24, 38, 47], communities can become jaded with academics because of their previous experiences with researchers who have worked with them and promised things without following through. Because of the historical role that universities have played in local communities, researchers may find themselves standing in as representatives of academic communities that they are not personally aligned with. In this way, honoring the relationship between research and relation means not only building relationships with community members, but also taking time to collaboratively figure out how to relate to each other, as suggested by Keyes, Hoy, and Drouhard [42]. Community-collaborative researchers' examination of their own identities with respect to histories of harm caused by their universities is indicative of the transformative (and poetic) potential of relation (as discussed in Section 3.2).

Some participants felt supported in the process of bringing together research and relation, but many participants felt like this crucial work of relational repair was not given the support to

happen (as often reflected in other work in HCI and CSCW, such as [47, 48]). The discipline-based challenges described by participants (in Section 5.3.1) reflected an internal sense of inertia defined by departmental and disciplinary norms that ultimately affected their relationships with their research, even if their departments were generally supportive of CCA as an intellectual project. The pressure of PhD student timelines, as noted in P10's experience, tell us how academic computing cultures models an expected pace for research progress. P6 and P7's discussions of how community-collaborative research is considered service work in their departments tell us how academic computing cultures expect research to fit within a certain model of interaction and inquiry (that typically also presupposes a standard amount of time and timing). Given the social considerations of CCA, these challenges can be further exacerbated by the ways that community partners and community work are affected by broader political relations, as discussed by Tandon et al. [71]. Though community-collaborative researchers orient their work to different norms (see Section 5.1.2), extra effort is often required to do so, especially in departments where that is not the norm.

By being compelled to prioritize academic outcomes, community-collaborative researchers are encouraged to see themselves as split between two worlds, even if they hold relation between them. By virtue of being community-collaborative researchers, they embody a certain kind of plurality: they enact translations between different worlds while existing in both, sometimes literally [61]. However, they are also burdened by an asymmetry between worlds, as one sets expectations in service of the future of their careers. As discussed in the previous paragraph and works such as [48], junior scholars are especially expected to fit themselves into the expectations of their disciplines while expanding the relevance or applicability of academic research. In this way, relation and territory (as discussed in Section 3.1) interact in how the academy attempts to use CCA to expand the territorial limits of its impact while devaluing the knowledge that is afforded by the existence of relation. Even in describing their desires for their research to be non-exploitative (as noted in Sections 5.2.1 and 5.2.3), participants implied that they understood normative research to be exploitative. In this way, community-collaborative researchers push back against the potential for territorialization by pushing against forced separation or incorporation of their research and community identities, encouraging us to consider how we might bridge both instead. However, this can be a difficult task to bear: the territorializing nature of the academy is evident in P18's experience pursuing a research project with a community organization they were a part of (Section 5.1.3). P18 brought research into their community in hopes of making their academic experience more joyful, but it instead made their community engagements more stressful. P18's relationship with research—which forced them to experience, process, and analyze the world around them in a particular way—eclipsed their relationship with their community. By connecting P18's experience with those of P6, P7, and P10 before, we see how the academy can expand itself and the influence of its world through immaterial means, particularly in how it encourages researchers to relate to and interact with their community partners with a certain set of priorities in mind.

From here, we may ask: what is the alternative? Referencing Indigenous onto-epistemologies, Tallbear and Willey [70] proposes that relationality holds "re-worlding" potential in how it requires us to understand (and thus practice/exist in) the world differently. With this in mind, we suggest that community-collaborative researchers should continue to lean on their relationships, both outside of the academy and within it (as described in Section 5.3.1 by P1 and P14-16). If we follow the belief that relationship-building has transformative potential [78, 80], we might consider how thoughtful partnership in the community and thoughtful mentorship in the academy are both necessary for the formation of new worlds that can enable different relationships between scholarship/knowledge creation and community work. If we consider all of our relationships as small-scale versions of the future worlds we are contributing to, what might we do differently? How might we reflect

on how some of our relationships reproduce broader systems of harm or separation? Taking the idea of relationality as re-worlding seriously can help us reflect on what worlds our relationships, and our actions within them, are in service of. To further support such reflections, we recommend that readers read the end of Leal, Strohmayer, and Krüger [48]'s paper reflecting on activism and academia, which presents a set of questions that offer a basis for reflection on how our research can contribute to re-worlding as we use CCA.

Turning to what we have learned from our participants in this vein, we notice how P18's experience might encourage us to more intently consider when we should keep aspects of our community relationships to ourselves—not only considering the community as separate from us, but also considering ourselves as a part of it. Or, considering P16's experience (described in Section 5.1.1), we may consider how concentrating on certain issues without broader reflection on the relationships behind them may mask how fixing these issues can harm others. Attuning to all the relationships involved in our research contexts can help us better imagine how we can be accountable to them, and like P16, we can choose to stop contributing to worlds we do not believe in.

6.2 Research *as* relation

Though our participants described experiencing pressure to follow research norms, they also described ways of doing research that challenged these expectations. Considering how people described their research practices, we may consider CCA as an urge or a desire for errant thought; researchers already practice research *as* relation in how they let relation change what research is. Errantry, as described by Éduoard Glissant (mentioned in Section 3.2), is a sort of wandering in search of the Other through an approach of circular nomadism rather than one of territorial expansion. Glissant's application of circular nomadism in his broader metaphor of Relation as a connection to land offers another way for us to relate to one another. Circular nomads relate to land and territory cyclically, and they move based on seasons or cycles of abundance and depletion. In this way, Glissant describes errantry as developing a close relationship that is not one of claim and expansion, but rather one of understanding and shared existence. Errantry in research, then, is attending to "not simply what is relayed but also the relative and the related" [33]—and we can see how community-collaborative researchers already push toward this in their existing research practice.

As P4 implied in Section 5.1.2, we can not only describe relationship building with communities as "the work before the work" but also explicitly as "part of the work." In their 2015 article, Le Dantec and Fox [47] proposed the phrase "the work before the work" to make visible the relational work that was fundamental to their research. Ten years later, however, it seems like it has been taken as an ontological distinction between research and relational work; though the effort required of CCA is generally more visible in HCI and CSCW now, many community-collaborative researchers still experience a difference between the work they need to do and the work they are expected to do. In working to reconcile this gap, we can further explore how we might value the knowledge created by our relationships in themselves.

In their influential article on invisible and visible work in CSCW, Star and Strauss [65] discuss different conditions that inform the (in)visibility of work and the ways that systems can contribute to making work more or less visible. They note that the act of making work visible can be complex, as it can lead to unexpected consequences or demands for workers. One example relevant to our work is how, "[i]n the name of legitimacy and achieving public openness, an increased burden of accounting and tracking may be incurred" [65, p. 24]. In this vein, researchers interviewed in our study did not want to make their work more visible, but they *did* want it to be recognized. In holding plural identities, researchers experience intimacies in their engagements that are not

meant to be shared in academic capacities, like "get[ting] to know people's everyday lives" (P2, Section 5.2.2). In acknowledging that some work in CCA must remain invisible, how can we value CCA as a (academic) contribution nonetheless?

We should again consider how non-normative research practices contribute to knowledge creation, even if not immediately visible. Participants described balancing their research and community engagements in many different ways, demonstrating how research as relation—and attending to the specific needs, cultures, histories, and practices of a community—is a part of how community-collaborative researchers strive to be thoughtful research partners (Section 5.2.1). As we outlined in Section 3.3, Indigenous onto-epistemologies teach us that knowledge is built through the practice of relationality—"relationships do not merely shape reality, they *are* reality" [80]. Applying this premise, we may build upon existing practices by interrogating how we instantiate realities through our relationships with the communities we involve in our research. Participants revealed to us how being a thoughtful community-collaborative researcher sometimes just means being a thoughtful community member. As discussed in Section 5.1.1, some community partners are not interested in the scholarship aspect of researchers' work in the community, so participants like P8 instead focus on analyzing their own experiences as a community member to generate intellectual contributions to research. By prioritizing their own participation in the community and subsequently developing relationships with community members and the context of their organizing work, P8 demonstrates how we can search for meaning with CCA through errant practice.

In determining what relational practice looks like to ourselves and our community collaborators, we should also consider how relationality may inform each step of our research process. Acknowledging the fact that community collaborators do not always care to participate in some of the more academic elements of research projects, for example, we may explore how we can co-produce relational understandings of the world through different means. P4 offers an idea of what is possible in sharing their practice of doing two distinct rounds of data analysis: one for the research, and one for the community to process their own data and experiences (Section 5.2.3). By making space for collective meaning making that can be better applied to community collaborators' lives, P4 brings the community together while also sharing the process of building up knowledge. Alternatively, we may consider how our own experiences with community may surface new understandings of the world. In this way, community-collaborative researchers show us that it is in caring for and relating to others that we are able to put our desires for CCA in practice.

7 Conclusion: From research ethics to poetics

A relational poetics foregrounds the conception of the self and/in relation to others in community-collaborative research, revealing intimacies and mutual transformations of identities. While other works in HCI have attempted to come to a synthesis of how CCA happen in various contexts and research labs, we chose to do an interview study to bring out the specificities and intimacies of this work, beyond best practices. By attuning to how researchers talk about their community partners, we surface a reality of what it means to conduct community-collaborative research in HCI and computing in U.S. and U.K. institutions. Through a collection of narratives, we have witnessed researchers identify themselves through and with their communities, both academic and non-academic.

The first author fostered intimacies with the people they interviewed to bring out these elements. A number of participants shared how they appreciated having a space to talk about their experiences, particularly around the relational and emotional challenges of their work. Many of these conversations have also become foundational to the first author's development of their own model

of community-collaborative research, practically, ideologically, and affectively. In this way, this work itself reveals the transformative potential of research through relation.

By attending to understandings of CCA beyond best practices, our work transcends the paradigm of research ethics towards a poetics of CCA; our participants' narratives come together to reveal something about the world. In wanting to understand intimacies and mutual transformations of identities, we reveal something about how universities as a project relate to the Other, and how it is misaligned with the ways individuals desire to relate to others. An underlying narrative regarding the challenges of relational research is the way that the university expects researchers to capitalize on their relationships to meet expectations of progress or to keep their jobs while simultaneously extending its goodwill in the broader community. As such, we find that we need to interrogate the university as both a territory and a territorializing force. Community-collaborative researchers hold relation across multiple worlds: they simultaneously exist within institutions of power and hope to wander outside of them by reaching out to identify and relate to the Other. What are universities doing that make people desire a place in communities elsewhere? We gain one perspective of the academy's territorializing nature by hearing how P18's community research experience became overwhelmed by its influence, and we gain another by hearing about how some participants felt a desire and responsibility to use CCA to share institutional power and resources (see Section 5.1.2).

In this way, we should attempt to understand the identity of the community-collaborative researcher with more awareness of its complexity, because understanding how people grapple with their positions of power and affiliation can help us understand what might need to change. We may notice that there is a hierarchy even within the university when we consider the complications of acknowledging relation and relational practice as a responsibility (see Section 5.2.2), and how this hierarchy is further established through the different expectations and abilities put upon both students and faculty. As discussed in Section 5.3.2, the future of sustainable community collaboration in academia should not be tied to the university, but it could certainly be better supported by it. As a community of researchers, we must determine together how to temper the university's desire to expand its territorial limits while making space for ourselves to wander.

Through interviews with 18 community-collaborative researchers in HCI and computing, we have synthesized and presented perspectives on the inter- and intra- community cultures and relationships that underlie CCA in computing. We contribute to the HCI community by 1) extending existing literature in HCI to expand our understanding of community-collaborative research practice; 2) surfacing the poetics (the aesthetic and political nature) of relational practice in community-collaborative HCI research; and 3) offering a direction toward which we should move to better support CCA in HCI and academia more broadly.

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